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ONTARIO AGGREGATE AND SECTORAL MACROECONOMIC IMPACTS OF PROPOSED REVISIONS TO REGULATION 308

JULY 1990

Ontario
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JULY 1990

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Abstract

Ontario Aggregate and Sectoral "Macroeconomic" Impacts of Revisions to Regulation 308

This report assesses the effects on the Ontario economy of four scenarios that represent alternative proposals for revising Regulation 308. Effects are measured both for total activity and incomes, and for the output and employment of sectors in the province. Effects on the total Canadian, and other-province, economies are also reported.

The alternative scenarios are differentiated both with respect to the magnitude of additional pollution-control and monitoring equipment that would have to be installed (Scenarios A-C), and with respect to implementation timing (five years for Scenarios A-C, and twenty for Scenario E). The alternatives account for additional investments in pollution control and their subsequent operation. These are required for a number of both private and public producers of goods and services; additionally, the Ministry of the Environment would face additional administration costs. The study also presumes that private producers attempt to pass their additional current costs on in the form of price increases, while public-sector organizations and the Government of Ontario cover additional costs through increased taxes.

The direct, annual additions to current costs of production in Ontario, measured as a share of total, provincial Gross Domestic Product, vary from a high of one-half per cent (Scenario A) to a low of one-quarter per cent (Scenario C). For directly affected firms, however, current costs, measured against the expected value added of the firms, will be much more significant. For refiners of petroleum, the share rises quickly to the range of 50 per cent. There would also be significant cost increases for manufacturers of pulp and paper, non-ferrous metals, asphalt, petrochemicals, and non-metallic minerals, and for dry-cleaning establishments.

Installation and manufacture of control and monitoring equipment (and associated structures), as well as operation of this equipment, will add to measured output and employment of the provincial economy. Efforts of firms to add these costs to prices of their goods and services, or of public institutions and government to cover costs through additional taxes or other revenues, will reduce output. Results reported in this study suggest that the net effect on total output and employment will be positive initially, but within a few years, is negative. In all cases, however, the negative effect on total provincial output is less than one per cent; the negative impact on employment never exceeds one-half per cent. Per household real disposable incomes are reduced after five years by 0.25-0.5 per cent. Considering that output and incomes should increase annually by 2-4 per cent, an impact of one per cent in the level of activity after five years or more suggests only a marginal impact on overall provincial growth.

Impacts on sectors (and, by implication, regions within the province) could be significant. Our results suggest that negative impacts on manufacturers of primary metals, non-metallic minerals, and chemicals could yield significantly slower growth. The impact on petroleum refineries could be sufficient to cause a decline in the size of the industry over time. For at least these industries, public policy would have to either accept significantly diminished prospects for growth of output and employment, or would likely be encouraged to find alternatives to "polluter pay" approaches. Staging-in implementation also raises equity issues, since new producers would be required to meet revised standards immediately, while existing producers would generate economic "rents" until they were required by deadlines to meet new standards.

This study also reports on the implications for those who supply control and monitoring equipment and services. Our results suggest that scenarios that require implementation within five years would, from the outset of the revised regulations, at least double the demands on the Ontario industry that are estimated to have existed in 1987. Impacts on the relevant portions of the construction and design industries would be smaller, but nevertheless, significant (as low as a 15 per cent increase and as high as 50 per cent). In view of this indicated, intense supply problem, the Ministry should focus on policies that facilitate supply as opposed to those that force purchasers to source locally. The magnitudes involved suggest that supply constraints, and consequent inflationary pressures, will be significant in any event.

The analysis underlying these results uses procedures that account, comprehensively, for both direct and indirect effects on the economy. They do presume, however, that regulation changes in Ontario are unmatched by those in other provinces or in foreign countries. Consequently, these results suggest small positive effects on several other provinces, although the national totals, and output of some provinces, are likewise diminished. As well, the Ontario results likely overstate negative impacts since a move to higher environmental standards in other jurisdictions is a possibility. As well, these results make no attempt to measure the positive effects on output, employment or market-measured incomes of reduced particulates.

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Glossary of Terms

Approvals - Permits issued by the Ministry of Environment for activity of a firm.

Base Case - A projection of the economy which assumes that existing (pre-Regulation 308) regulations prevail.

Capital Servicing - Annual capital consumption allowances (expenditures) to account for the depreciation of previously installed control and monitoring structures and equipment.

Capital Stock - At any point in time, the amount of plant and equipment that is available to support the productive activity of firms and industries.

Direct, Indirect and Induced Effects - Decomposition of employment, income and other economic impacts that account, respectively, for:

- activity directly traceable to the investment spending of those affected by the regulation on control plant and equipment, or to their attempts to secure compensating income through price or tax changes,
- activity of intermediate suppliers to those directly affected, and
- activity of those who respond to the influences on incomes of those directly, and indirectly affected.

Durables - An industry classification term referring to production, within manufacturing, of the following industries: wood products, furniture, primary metals, metal fabricating, non-electrical machinery, transportation equipment, electrical products, and non-metallic minerals.

Fabricated Investment Goods - Pollution-control and monitoring equipment produced by the manufacturing sector.

Four-digit Level of Industry Detail - Production of goods and services is classified by a Standard Industry Classification, at increasingly detailed levels measured by "digits". Thus a two-digit description within the manufacturing sector would describe a "primary metals" industry, which in turn is composed of three-digit industries including iron and steel mills, steel pipe and tube mills, iron foundries, etc. The four-digit components of the iron and steel mills are described as continuous steel casting, ferro-alloys and pig iron, galvanized sheet, etc. Detailed analysis of control and monitoring equipment requirements were undertaken by other elements of this study at the four-digit level. The models used in this element of the analysis use two and three-digit descriptions. Thus, some aggregation of information supplied by other elements was required.

Impact Procedures - The steps in the analysis required to measure the Regulation 308 impacts on the economy; in this case, those which support a comparison of the economy affected by Regulation 308 with one (a Base Case) in which there is no such regulation.

Import and other Price Elasticities - The extent to which the volume of imports or other demand is changed by a given change in the price of the commodity or service.

Input-Output Table - In this analysis, parameters that are used to direct final demand expenditures (consumption, investment, foreign trade, government spending) to the appropriate producers, and that given this impact on producers' activity, further allocates impacts on the industries that supply those directly affected by final demand.

Investment, capital - spending of those directly affected by Regulation 308 on plant (structures) and machinery to install pollution-control and monitoring equipment.

Monopoly Power - The degree to which conditions of the market depart from those of perfect competition; usually associated with an ability to generate profits beyond those that would normally be required to induce entry of new equity into the firm or industry.

NTBs (Non-tariff Barriers) - A reference to foreign trade restrictions other than tariffs; includes quantitative restrictions, use of "standards" and other such devices when their intent is to impede imports.

Perfect Competition - A market in which the following assumptions hold:

- there are a large number of buyers and sellers,
- the quantity of the good or service bought by any buyer or sold by any seller is so small relative to the total quantity traded that changes in these leave market price unaffected,
- units of the goods and services sold are identical,
- there is perfect information about prices and terms offered available to buyers and sellers,
- there is perfect freedom of entry for new sellers (producers),
- the market adjusts rapidly to discrepancies between supply and demand, and

- in the long run, there can be no profits other than a normal competitive return to the entrepreneur.

Real Income/Wages, Nominal Wages - Nominal wages refer to the wages paid at the labour costs of the year reported; "real" income and wages refer to annual flows less changes in prices, in this case, those faced by consumers.

Relative Prices - Prices of one commodity/industry compared to prices of other commodities/industries.

Retro-fitting - Estimates were provided by other elements of the study of the amount of new, control and monitoring plant and equipment required to bring the existing capital stock (at 1987) up to Regulation 308 standards. To do this, will require retro-fitting of existing production facilities. For production facilities put in place after 1988, inclusion of control and monitoring equipment in the initial design should make the cost of such equipment less expensive than that which has to be retro-fitted to existing capital.

Unit Labour Cost - The nominal wages (labour income) required to produce a real (inflation adjusted) unit of output; measured at the industry level in this analysis as nominal labour income divided by real output of the industry.

Value Added - The difference between total revenue of a firm/industry and the cost of bought-in materials, services and components. It thus, measures the value which the firm has "added" to these bought-in inputs. Summing the value-added across all industries/firms provides a measure of total value produced by the economy, as measured in markets. Value-added is distributed among wages (to attract labour), capital servicing/charges (to pay for the flow of services provided by the stock of productive capital that is input to the production process), and rents and dividends (to attract equity).

1 INTRODUCTION

This element of the study of the impacts of revisions to Regulation 308 focuses on the total and sectoral implications for the economy of Ontario. Emphasis is placed on the output and employment of these "macroeconomic" effects, but income and demographic implications are also reported.

From the perspective of this project, revisions to Regulation 308 have two, competing influences. Changes in regulations will require private and public sector producers of goods and services to increase their investment in structures and equipment that abate pollution and monitors its effectiveness, and will require them to use a larger number of employees and a greater amount of material inputs to operate and monitor the consequences of the increased abatement activity. This will have a positive effect on Ontario's (and Canada's) output and employment.

There are direct, indirect and induced effects related to these additional expenditures. Seen in employment terms, for example, the additional investment expenditures will directly add to employment in the construction industry, in that some portion of the additional investment in structures or in the installation of equipment will be allocated to on-site labour. Suppliers of construction materials for the structures, and of the abatement and monitoring equipment will indirectly add to employment in the economy in that they too will require additional employees to supply the incrementally required equipment and materials. (Suppliers of intermediate goods and services to the firms that provide inputs to the construction sector and to manufacturers that provide the abatement and monitoring equipment are also counted as part of these indirect effects.)

The additional wage income received by these directly and indirectly affected workers will in turn induce other positive employment effects as at least part of their additional income will be recycled as increased demand for consumer goods. These induced effects will be reinforced by additional consumer expenditures that follow from increased shareholder incomes of the construction, manufacturing, and other industries who respond to the abatement-related investments. As well, industries supplying the investment, and those supplying the additional consumer demands, are likely to increase their own investments (to meet the additional demands on their capacity), thereby setting off yet another round of induced effects. And finally, some portion of the additional incomes received by all workers and shareholders will be captured by governments, who given changes in their fiscal position and the additional private-sector activity may increase their real demands on the economy.

Similarly, additional requirements for employees and material inputs to operate and monitor the additional equipment will generate direct, indirect and induced positive effects on employment. The direct effects are constituted by the additional employees required of the regulation-affected organizations to operate and monitor the abatement, and any effects on Ministry of Environment employment needed to handle changes in approvals. Indirect effects will occur among those firms that supply the required material inputs. And finally, the additional wage, shareholder, and government incomes related to the operating expenditures will induce yet other activity to meet increased consumer, investment and government demands.

It should be noted that some of the investment expenditures, and likely some of the indirect and induced expenditures related to operating and monitoring expenditures will be supplied as imports. From Canada's point of view, these will show up as imports from foreign economies. These will include some portion of the directly required equipment and that which is otherwise indirectly affected, some portion of additional materials required by the domestic industries that supply the abatement equipment, and of course, some share of the additional consumer expenditures that are induced by the program. From Ontario's point-of-view, some portion of the additional expenditures will also be supplied by "imports" from other provinces. On the other hand, some Ontario firms will benefit in that they will provide intermediate inputs to non-Ontario, but Canadian, suppliers of the abatement equipment, or they will supply goods and services for additional personal consumption and investment that occurs outside the province.

Additional capital required to reduce pollution, and the additional operating expenditures for abatement and monitoring, will likely have offsetting, negative effects on the economy of Ontario. Seen from the point-of-view of the regulation-affected firms, additional annual operating and monitoring expenditures, and annual allowances to cover the additional fixed capital that is required, constitute increased costs for which there is no marketable output, or offsetting income derived from sales. (Marketable by-products of the abatement may of course be generated to constitute a positive income offset.)

Firms will either attempt to pass these costs on in the form of price increases for their marketable outputs, or will have to reduce payments to their workers or shareholders. In firms that operate in perfectly competitive markets, attempting to absorb the additional costs through reduced incomes of workers or shareholders implies increased difficulty in acquiring workers or equity. It could imply an inability to acquire them at all, and in some cases, could imply that variable costs would not be covered, leading to a shut-down of operations and scrappage of existing, fixed capital. Firms that operate in markets with some degree of monopoly power may have less difficulty in absorbing costs through reduced wage or shareholder income, but increased difficulty will nevertheless be present.

Firms that attempt to pass the increased costs on in the form of higher prices will face real, negative effects in their markets.

Again, there are direct, indirect and induced implications of this. The direct consequences will reflect the extent to which consumers of the firms' products or services are price sensitive. This will vary from firm to firm and from industry to industry. For those who face highly competitive situations internationally or domestically, and that includes most of manufacturing, the adverse effect on sales is likely to be most dramatic. For those that exercise some degree of monopoly power, or for which the outputs of the firm have few close substitutes to which consumers can move, the adverse consequences will be smaller. Finally, for organizations whose income is not generated by markets (i.e., the hospital system), there may be no "sales" effect, but increased costs imply additional financing from government, or the public. Failing this, there would have to be increased debt to cover additional capital and operating expenses.

Increased prices for the products and services of the directly affected firms constitute increased costs for their consumers, of whom some will be industries that in turn supply materials or equipment to the directly affected firms and industries as well as to the economy as a whole. Thus, from the stand point of Ontario consumers and other producers, they face direct and indirect price increases. It may be noted, of course, that some of these price increases will affect producers and consumers in the rest of Canada as well. Increased commodity prices typically induce increases in wage rates as workers attempt to keep pace with the inflation they observe as consumers. This helps to spread the effect on prices and costs through the whole economy. It implies, generalized, negative effects on exports and increased volumes of imports.

The extent to which prices are passed on to consumers, investors and governments may induce unfavourable effects on production in that these price increases constitute a reduction in real incomes. Again, this effect will vary from firm to firm and industry to industry, since consumer purchases of individual commodities vary in their sensitivity to changed real incomes.

Two other, possible transmission effects should be noted. Additional requirements for investment constitute additional demands on credit markets. Arguably, these additional demands, in the absence of effects that generate additional savings, could lead to increased interest rates. In this event, there should be further negative effects on investment generally and consumer spending that is interest-rate sensitive.

The effects on prices generally constitute a loss of Ontario's and Canada's competitive position internationally, and with possible negative consequences for total output, should have a negative effect on the value of Canada's currency in exchange rate markets. The extent to which this would arise will also be sensitive, however, to the degree to which interest rates rise. In the event of a depreciation in the value of the Canadian currency, this would provide some positive effects for the output of internationally competitive domestic industries. It would, however, reinforce general inflationary effects, and would diminish output prospects for producers oriented toward the domestic consumer market.

This study uses procedures, detailed below, that assess the direct, indirect and induced effects as outlined above. Where possible, these three transmission mechanisms have been separately identified in developing the analysis, but results are reported *ex post* all of these effects.

Results are reported for four cases, Scenarios A, B, C and E where these are based on varying views of the direct expenditure requirements supplied by other elements of the research project. Cases A, B and C assume that the revised regulations are implemented beginning in 1989, and are fully effective for all producers within five years. Scenario E assumes that initial implementation begins again in 1989, but full implementation is phased in over a much longer period, being completed only in 2008.

2 RESEARCH METHOD

2.1 Overview

To assess the full implications, we have used two econometric models of the Canadian and provincial economies. (Appendixes A and B provide an overview of the model structures.)

We start the analysis with a national model because this is the only level at which there are sufficient details on demand, output, and prices to bring a consistent set of economic theory to bear on how economic actors behave and might respond. Especially crucial to the analysis is a detailed view of industry prices and costs; this must be available for both directly affected and all other industries. Information on this is available only at the national level. As well, it is useful to recall that direct impacts on Ontario will be transmitted through to producers and consumers in other provinces, with feed-back from them to Ontario.

The national model (TIM) assesses the national economy in terms of more than 6,000 variables. These include details on approximately 400 items of final demand, including 60 measures of personal consumption, investment expenditures (separately identified for purchases of equipment and structures) for approximately 60 industry categories, exports and imports for approximately 50 categories of goods and services, and government spending detailed for the federal, provincial and municipal governments as well as spending of school boards and the hospital system. In most instances, demand is sensitive to price, income and population effects. (We have assumed there are no changes to the Canadian population induced by the 308 revisions.)

Demands on the economy are translated through to production through use of input-output tables so that both direct and indirect implications for production are evaluated. Production is determined for approximately 80 categories, which exhausts total production. For each of these, employment is determined and is sensitive to output and capital stock measures. Income generated by production is allocated to labour and returns to capital from which various levels of government derive tax revenues. Industry output prices are determined by unit labour costs, which reflects effects on wages and labour productivity, indirect taxes, and import prices. (Thus, any effect of 308 revisions on the Canadian exchange rate would be captured.) The use of input-output tables ensures that indirect effects on prices are captured. Final demand prices are then determined as the weighted sum of producer prices.

Finally, it may be noted that TIM incorporates dynamic properties, and is non-linearly sensitive to the scale of the direct shock. Thus, effects in one year will have consequences for economic performance in succeeding periods. And direct effects in one case that are double those of another may not yield impacts that are twice as large.

Provincial effects are modelled in the RIM model. This allocates the effects on industry output and employment by producing sector in approximately the same level of detail as exists at the national level. Effects on producers of goods are exogenously determined as shares of national production at the industry level, where provincial shares are tied in some instances to detailed demand variables available at the national level. Thus, for example, metals' mining in Ontario would be sensitive to effects on exports of nickel, but largely insensitive to effects on exports of copper or iron ore, or imports of bauxite.

Production of services industries is determined by the performance of goods producing industries in the province, or in bordering provinces. RIM also incorporates an internal migration model, where population movements are determined by relative employment opportunities. Population, in turn, affects output and employment in each province's services sectors. Thus, impacts that tend to diminish employment opportunities in Ontario relative to that in other provinces will induce some emigration from the province, with negative consequences for services producers in Ontario and positive ones in the receiving provinces.

2.2 Base Case

Given this framework, we have followed standard impact procedures. A Base Case forecast of the national and provincial economies has been developed projecting economic performance for each year from the present through to 2005. (Appendix C provides an overview of this outlook.) Assumptions specific to each of the four scenarios have then been introduced to produce an alternative, impact forecast of the economy. Comparison of each of these to the Base Case provides measures of the economic impact of revisions to 308.

The Base Case portrays a national and provincial economy that, in 1989-2005, experiences generally steady growth sufficient to provide employment to a growing labour force. The unemployment rate, however, remains well above levels that could be considered as associated with accelerating inflation over the longer term. A deceleration of growth and consequent increase in the unemployment rate is projected for 1989-90, following from a slowing of growth in the U.S. Ontario's prospects are particularly sensitive to this assumption. Inflation is moderate (i.e., at less than 5 per cent annual increases) throughout. Growth is widespread among producing sectors, the major exception being for tobacco products, which is assumed to be unfavourably affected by regulations and changing consumer attitudes.

Of potential significance to impact measures is the projection for interest rates, which in both nominal and "real" terms are high throughout the projection. This significance follows from the fact that financing of investment is assumed to be related to industrial bond rates, and our projection accordingly, assumes that these costs will be high by historical standards. This financing is assumed to be passed-on in the form of higher producer prices. The assumption that interest rates will remain high over the next 2-5 years is reasonable in light of known influences, and continues the experience of the last few years.

These influences include the continuing "twin deficits" (of the federal government, and a large current account deficit) in the U.S., leading to restrictive monetary policy in the U.S., and high interest rates for that country over the medium and long term. Over the next year or two, accelerating inflation in the U.S. is widely considered by forecasters as likely; this is expected to reinforce the tendency to tighter monetary policy. These have direct consequences for interest rates in Canada.

In Canada, we have assumed that interest rate spreads between Canadian and U.S. rates will narrow some from recent experience, but the high interest rates in the U.S. dominate.

Changes in relative prices of commodities could also significantly affect the views of impacts. If, for example, it were anticipated that the commodity prices of an industry to be regulated were likely to be depressed (or, would grow rapidly) for a prolonged period of time, it could arguably have an influence on one's view of the ability of the industry to absorb additional expenditures. The Base Case used presumes no radical changes in relative prices, although there is a tendency for primary commodity prices to rise slightly more rapidly than those of manufacturers over the long term.

Variations from this basic view could be significant for a particular industry or firm, but reasonable variations from the Base Case outlook would be unlikely to change the aggregate impacts we report in this study.

2.3 Free Trade

The Base Case used assumed the Free Trade Agreement with the U.S. was not completed. This is likely important in only two important respects.

The Agreement may or may not have positive effects on the real output and employment of specific industries; the very strong consensus of the informed analytical community is that the effects will be positive overall, and that these kinds of effects will be widespread across industries and provinces. If there is a difference of opinion in that community about provincial impacts, it is that while most expect there will be uniformly positive effects across the country, departures from this view suggest disproportionately large, positive effects for Ontario.

There may be negative effects on output of sectors of relevance to this study, but the consensus view would suggest otherwise. The two possible candidates for reduced activity are in the food manufacturing industry and for printing and publishing. But the meat processors are expected to be big winners because the Agreement reduces substantial U.S., non-tariff barriers in this area; supply management is unaffected by the Agreement, directly, suggesting that the impacts on the other components would be small. Restaurants should be big winners.

In this respect, the official position of Ontario has been quite different, though there appears to be a difference of opinion about the economic impacts between Treasury and MITT. The latter has released a number of studies suggesting wide-spread reductions in output. The Treasurer, in the last budget, indicated that the effects on total output would be minor.

This is relevant to the following point. If the Agreement has positive effects on output, and if these are widespread in Ontario, as is the result reported by the consensus of analysts, then the growth of private capital stock that is required to add abatement and monitoring equipment in Ontario could be enlarged over that of the Base Case we have used in the near to medium term. Assuming that all new plants must meet revised 308 standards, this would suggest larger expenditures for pollution control equipment than we have assumed and that are reported in the next section. If the Agreement has MITT type effects, then the requirements would be reduced.

The second relevant point about the Agreement that could have relevance is its impact on the ability of firms to "absorb" additional abatement costs. There may be dispute about real activity effects, but there should be little about the conclusion that the Agreement will have "deregulation" impacts. Reductions in tariffs and NTBs should move domestic markets toward, if not necessarily to, perfect competition. In short, any economic "rents" that have formerly been available and that would have been captured by workers and shareholders (and managers) will no longer be available for redirection to environmental, or other, needs. This result, however, could follow from strengthened Canadian competition laws in any case.

It should of course be noted that many other events of at least equal significance (and equal uncertainty as to their effects) could occur, but are not included in the Base Case. These include conclusion of a major multilateral trade agreement following from the Montevideo Round of GATT now being negotiated, implementation of a value-added tax, with corresponding additional personal and corporate income tax reforms, a major and prolonged downturn (or, upswing) in U.S. economic prospects, etc. Each would, in its turn, affect the growth of the capital stock in the sectors to be directly affected by revisions to Regulation 308, and many could affect the "absorption" capacity of the affected industries.

Finally, it should be noted that exclusion of the Free Trade Agreement as it is embodied in the Base Case is consistent with the view that failure to conclude the Agreement would leave trade relations with the U.S. (and domestic economic behaviour) unchanged from that which prevailed prior to the signing of the Elements of the Agreement or the Agreement itself. Given the political context that prevailed at the time the analysis underlying this study was completed (mid-1988), however, that may be unduly optimistic.

Arguably, rejection of the Agreement by the Canadian electorate could have triggered the following scenario. There is at least an even chance that it would put significant downward pressure on the Canadian currency initially. This would provide a competitive advantage to Canadian manufacturing to sustain output, but it would be inflationary and likely lead to a further widening of the gap between Canadian and U.S. interest rates. This has opposite effects for manufacturers and all others. It would make the cost of financing investment in abatement and monitoring equipment more expensive. (At least one of the parties prior to the election had indicated that they would be able to persuade or otherwise cause the Governor of the Bank of Canada to narrow the rates, but it is not clear how this would occur, nor what the "uncertainty" consequences of this might be for exchange and other markets.)

The Federal opposition parties had also indicated that their alternatives to the Agreement would include additional expenditures for literacy training, worker mobility and re-training programs, and additional spending to stimulate regional economies. Annual federal capital assistance reached the $3 billion range in 1982-85, largely because of the National Energy Program, but has now been reduced to about $1.5 billion. Perhaps, regionally oriented development strategies imply restoration of spending to these earlier levels. The costs of the literacy and other programs were hard to pin down.

All of this would add to GNP unless it were paid for by substituting these expenditures for commitments made to defence and other programs of the then, current government. In any case, it would be occurring with higher interest costs for governments, and in the face of deficits that would likely rise with a slowing North American economy. A tax increase would be likely in that scenario; there is an even chance that it would have been targeted at the corporations.

Finally, it is possible that the U.S. would have reacted adversely and constrained access to its market beyond what could have been expected in late 1987 before the Elements of the Agreement were initialled. In this event, there would have been negative effects for Canadian exporters.

3 REVISIONS TO 308 AS DETAILED ASSUMPTIONS TO THE IMPACT STUDY

Potential revisions with economic consequences have been defined in four scenarios (A, B, C and E). Each is distinguished by the amount of abatement and monitoring equipment and structures necessary to control emissions, and related operating expenses. Additionally, it has been assumed that expenses of the Ministry of Environment would be affected, reflecting impacts on the number of additional approvals that must be made.

Estimates were provided by other elements of this study of the amount of capital and operating expenses necessary to reduce the emissions of private and public producers to scenario-defined standards as of 1987. The amount of activity, from which emissions flow, will of course vary from the 1987 standard over the future, however. We have, therefore, estimated that expenses will include the following:

- that which is necessary to control emissions from the 1987 stock of producer capital,
- that which is necessary to control emissions from the additions to capital stock made in 1988, and
- that which will be necessary to control emissions of any future additions to capital stock, this being estimated from the Base Case.

It has been assumed that revisions would begin to take effect in 1989, and would be staged in over varying periods. Scenarios A, B and C assume that producers operating as of the end of 1988 would have five years to reach scenario-defined standards. Scenario E assumes that standards would have to be reached in two phases, the first of which is completed in 2003, and the second in 2008 (after twenty years). Any additions to producer capital made after 1988 would have to meet acceptable standards as they come on stream. That is, we have assumed that future additions to producer capital, like that currently in place, would fail to meet the revised standards in the absence of changed regulations.

Data on the amount of additional, scenario-defined expenditures were supplied to this study as investment requirements required for abatement and for monitoring the abatement, and operating expenditures, again related to abatement and monitoring. These were provided at the four-digit level of industrial detail in 1986-dollar terms, and constitute the amount needed to bring the producer's capital stock up to scenario standards as of 1987. Appendix H tabulates these direct impacts as defined in those other elements of the study, re-classified sectorally to suit the requirements of TIM/RIM.

Since our study measures the impacts for each year from 1989 through 2005, it has been necessary to convert these expenditures into the 1971-dollar terms used by the models, and to nominal-dollar amounts for reporting purposes. Appropriate industry deflators available from the Base Case have been used for this purpose. As well, to reflect the phasing-in provisions of the scenarios, we have assumed that regulation-related investments for industry in place as of 1988 would be equally distributed over the number of years available for the phasing-in. Thus, Scenarios A, B and C assume that one-fifth of the investments occur in each of 1989-93. In Scenario E we have assumed that one-fifteenth of the investments needed for Phase I abatement are occur in each of 1989-2003, while one-twentieth of the Phase II investment occurs in each of 1989-2008. All new private capital stock, which is estimated from Base Case projections, is assumed to meet Regulation standards in the year in which it comes on stream. The abatement expenditures required for this new capital stock are assumed to be less than that needed to bring the existing capital stock up to standard, because no "retro-fitting" is required.

Finally, it should be noted that the model used assumes there is a relationship between the fixed capital stock in place, and employment required; this is modelled at the detailed industry level. As a general rule, but not in every case, capital substitutes for labour. The regulation-related investment, however, is not designed to contribute to this normal relationship between capital and labour required to produce marketable outputs. Accordingly, we have neutralized the effect of regulation-related changes in the capital stock of affected industries on employment. Changes in output derived from general investment flows and changes to prices do, of course, alter employment in these, and all other, industries.

Operating expenditures were also provided as a one-time amount, again reflecting the requirements of industry as of 1987. To schedule the phasing-in of this, we have assumed that the proportions between capital and operating expenditures provided by the other elements of the study are maintained over time. This reflects the assumption that operating expenditures for abatement and monitoring would have to be delayed until abatement and monitoring equipment was put in place. Accordingly, operating expenditures grow over time in line with the installation of abatement and monitoring equipment. Further allocation of the operating expenditures as between labour and material costs have been made on the basis of information supplied by other elements of the study. While this varies from industry to industry, approximately one-half of the expenditures are allocated to labour costs. Using Base Case wage rates for each of the industries, these have been introduced as additional, direct employment requirements for the affected industries. In total, this adds 7,000-9,000 to employment directly be 2005. Details of this, reported by affected sector, are tabulated in Appendix D.

To estimate the impact on Ministry expenditures, we have estimated the number of firms/plants that would constitute the universe that requires Regulation 308 approvals; this varies as between Scenarios A, B and C and Scenario E. We have assumed that the number that face future coverage grows by 2 per cent annually. This estimate of the number of plant/firm sites is then broken into those that will need initial approval at least once in the first five (or, fifteen, for Scenario E) years. Then, based on these first-round approvals, renewals are estimated for those that have one, three and fifteen year renewal requirements. These are added to the first-time renewals to generate an estimate of the approval demands on the ministry, each of which is assumed to be costed at $22,278. We have subtracted from this, approvals that would occur in any event (i.e., in the absence of revisions to the Regulation), each of which is assumed to cost the Ministry $14,768.

The tabulation below, provides indications of the variations in producer and ministry expenditures that follow from each of the scenarios. Appendix D provides year-by-year assumptions for each of the scenarios, and for each of the industry sectors modelled in TIM/RIM. Four-digit level information made available from other elements of the study have been aggregated into impacts on fifteen sectors reported in the models.

From the point of view of directly affected firms or other organizations (e.g., hospitals and municipalities operating waste disposal sites), the annual spending for capital represents a charge on working capital, or a requirement for additional equity/debt. The amounts shown should not, by themselves, represent a basis for special concern about compliance except insofar as the affected firm will face the need to finance the capital expenditure from working capital, or by acquisition of additional equity/debt. From the viewpoint of the economy as a whole, it may be noted that these amounts represent additional demands for credit, however. As we noted earlier, such requirements could have an effect on interest rates, but our simulations reported below assume no such effect.

Table 1
Total Capital, Operating and Monitoring Expenses
(in millions of nominal dollars)

	1989	1993	1998	2005
Scenario A				
Annual Spending for Capital	842	987	109	298
Annual Current Expenses	236	1148	1432	2158
Annual Ministry Expenses	19	22	1	6
Scenario B				
Annual Spending for Capital	1407	1621	232	449
Annual Current Expenses	309	1490	1861	2704
Annual Ministry Expenses	19	22	1	6
Scenario C				
Annual Spending for Capital	591	692	78	216
Annual Current Expenses	180	858	1079	1675
Annual Ministry Expenses	19	22	1	6
Scenario E				
Annual Spending for Capital	317	380	438	410
Annual Current Expenses	89	431	1020	2201
Annual Ministry Expenses	7	8	10	18

The current expenditures reported include annual expenses for operating abatement and monitoring equipment, an estimate of the annual costs of servicing the capital expenses that have been incurred in the process of installing the control equipment and structures, and the Ministry expenditures. (The investment flows, operating expenses, and ministry expenditures reported in Appendix D are direct inputs to TIM. The model endogenously determines the effects of annual capital servicing, given the investment flows.) From the point of view of the affected firms, this constitutes an estimate of the direct effects on income and expenditure statements.

Attention to Table 1 provides early indications of the varying macroeconomic impacts that can be anticipated from each of the scenarios. As between Scenarios A, B and C, which assume full implementation within five years, Scenario B requires the largest capital (and, ultimately operating) expenditures, while Scenario C requires the least. Initially, the positive effects outlined in the introduction to this report should dominate and are relatively large over 1989-93, while over the longer term, increases in annual current expenditures of firms will grow and if passed through in prices or tax increases, will provide dominating negative effects. Post 1993, there are additional investment demands, reflecting the fact that new firms in each of those years are assumed to meet the more stringent Regulations, but these amounts are generally small.

Scenario E stretches compliance out over a longer term, and in the longer term, has about the same direct effect as Scenario A. This implies that the positive effects from increased investment demands on the existing capital stock will exert their influence throughout the whole period simulated, but the amount of this is smaller in 1989-93 than in the other three cases. Operating expenditures grow more slowly than in the other cases, reflecting the stretching out of compliance, but by the late 1990's, they would be approximately the same size as in Scenario C. Ministry expenditures are also stretched out over the longer period of time.

Table 2
Current Expenses as Share of Value-Added of
Directly Affected Firms, 2005,
by Scenario
(in per cent)

	A	B	C	E
Open Pit Mines	4.4	4.6	0.3	4.0
Food Processing	4.1	4.2	2.3	4.3
Charcoal-Using Restaurants	9.5	9.5	0.0	9.5
Pulp and Paper Manufacturing	0.7	0.7	0.5	0.7
Pulp and Paper, Printing and Inks	0.9	0.9	0.3	0.9
Foundries	4.7	4.8	4.2	4.9
Non-ferrous Smelters	8.3	8.3	6.2	7.9
Iron and Steel	3.8	3.8	4.8	3.9
Automotive Industry	0.9	3.6	0.7	0.8
Petroleum Refining	52.4	63.5	26.6	55.0
Asphalt	6.7	6.7	6.3	7.1
Petrochemicals Manufacturing	6.7	6.8	3.8	6.8
Dry Cleaners	5.3	6.6	2.2	5.3
Non-Metallic Minerals	8.4	8.4	7.4	8.8
Electric Power	3.2	7.5	0.0	3.2

Using Informetrica Base Case estimates of Gross Domestic Product for the fifteen affected industries that can be identified separately in our forecasts, and employment estimates developed by DPA, we have calculated the annual current expenses as a share of value-added by the firms directly affected for each of the scenarios as an indication of compliance difficulties. (Creditors, or those involved in providing additional equity to the affected firms, would evaluate analogues to these flows in determining their terms for making financial capital available.)

These are reported in the tabulation above for the year 2005, when all additional control equipment and structures would be installed in scenarios A, B, and C, and almost all of that required by Scenario E would be in place. It should be recalled, of course, that ratios approximating those reported for 2005 would be reached by 1993 in Scenarios A, B and C.

This is a useful indication of "absorption" or price-pass-through problems since the "product" of the additional annual expenditures ("cleaner" air) cannot be valued by the firm in sales of its marketable products and services. It also provides a useful indication of the extent to which each Scenario's long-term consequences for an industry vary significantly from scenario-to-scenario.

From the first perspective, the figures provide a measure of the extent to which the firm would have to absorb the additional expense through reduced payments to workers or shareholders if it could not pass the additional expense on in the form of higher prices. It may be noted that if the "normal" distribution of value added in firms is 70 per cent for labour and 30 per cent for payments to service capital and shareholders, a 5 per cent ratio in the tabulation above constitutes about 15 per cent of funds normally allocated by the firm for the second purpose. Seen in these terms, this constitutes a large figure.

These figures suggest that Scenarios A and B would constitute a major problem for all industries except possibly, pulp and paper related firms, and the automotive sector. It would constitute very major problems (i.e., additional expenses would exhaust, or come close to exhausting, the normal allocation of funds to pay for capital) for restaurants, non-ferrous smelters, and non-metallic mineral producers. Refinery expenses would absorb a significant amount of the income normally provided to labour as well as all of that normally distributed to cover capital. Scenario C would constitute a less severe problem for most industries, but on these measures, it would remain notably significant for non-ferrous smelters, iron and steel producers, asphalt, non-metallic minerals, and refiners.

In the long-term, Scenario E poses problems for industries close to those of Scenario A. This would be stretched out over a longer period, however; in 1993, the ratios are one-fifth to one-fourth the size reported above for 2005. By even that early period in this Scenario, however, the ratio has reached 14 per cent for refiners, and is at or exceeds 3 per cent for restaurants, non-ferrous smelters, chemicals, and non-metallic minerals.

Phasing-in expenditures poses another problem that should be considered by the Ministry, in that we have presumed that existing producers are provided some time before compliance is required, while new producers (more properly, new plant and equipment regardless of ownership) must comply when it is brought on stream. Effectively, this provides an economic "rent" to existing producers who are not required to absorb 308-related expenditures during some period while new producers face this cost burden. Further, it is not clear what compliance instruments would be available to force existing producers to the new standards until the last required moment. These problems are provided their sharpest relief in Scenario E, where compliance is stretched out over fifteen-twenty years, but it is also true in the case of the other three scenarios as well.

In the normal course of events, producers can be expected to attempt to pass additional costs on to their market. Their ability to do so, and therefore, their ability to "comply", will vary with the nature of the market. Thus, dry cleaners and electric power producers should have less difficulty since there are no close substitutes to the services they provide. In the case of electric power, their market may in fact increase, since one of the close substitutes to their "product", the output of refineries, is passing on a much larger cost. Similarly, producers of manufactured non-metallic minerals will likely have less difficulty than others since transport costs for competing suppliers will constitute a significant substitution barrier for many of their products. Finally, restaurants may be able to pass on some of the costs, though other food-away-from home constitutes a generally close substitute to charcoal-cooked food. Alternatively, the affected restaurants may simply drop such items from their menus; it may be noted, however, that this may simply lead to more use of charcoal by homeowners, yielding no net benefit to the environment. For all other producers, close substitutes are likely to constitute significant problems for producers who attempt to pass on the additional costs.

In this assessment, we have assumed that attempts to pass on the additional costs are made by all private-sector producers. The direct consequences of this are then determined by demand, price elasticities in foreign and domestic markets as this is measured in our models. Impacts will also be sensitive to assumptions about whether other provincial, or foreign, jurisdictions are moving to stricter regulations. In these impacts, we have assumed there are no such changes outside Ontario; accordingly, these impacts should be characterized as severe since other jurisdictions are likely to also move to more stringent standards. (It may be noted that there are other possible, adjustment scenarios for firms. Thus, the indicated costs for refineries is so large that this could easily lead to the end of any additional refinery capacity in the province; scrapping of existing facilities is also possible, since it is not clear that private, variable costs could be covered if these expenses are borne by the firms.)

We have assumed that additional expenses of hospitals and additional ministry expenditures are covered by increases in provincial direct taxes of households. Additional spending of municipalities is covered by additional property taxes levied on households and business. As is indicated in Table 3, below, these vary by scenario.

Table 3
Income and Property Tax Increases, Selected Years
(in millions of nominal dollars)

	1989	1993	1998	2005
Scenario A				
Income Taxes	27	60	48	71
Property Taxes	5	24	31	42
Scenario B				
Income Taxes	27	60	48	71
Property Taxes	9	42	51	65
Scenario C				
Income Taxes	26	56	42	61
Property Taxes	1	3	4	6
Scenario E				
Income Taxes	10	22	44	91
Property Taxes	2	9	22	45

In the long term, these additional price and tax charges to "consumers" are equivalent to 0.25-0.4 per cent of all anticipated Ontario income.

To isolate impacts on Ontario, we have assumed the following. Investment associated with the construction of control-related structures, and the fabrication and installation of equipment will have positive effects on demand and output in the province and the country as a whole. We have assumed that all construction activity directly related to the program is sited in Ontario.

The manufacture of equipment is assumed to be supplied on normal commercial terms; that is, we assume there are no special provisions requiring firms to procure the equipment from Ontario suppliers. If other than "normal commercial terms" are used, this would constitute a special monopoly privilege for Ontario suppliers, who in response could be counted on to increase their prices above normal commercial terms. This would imply that the nominal dollar investment costs we have assumed, and have been reported in the tabulations detailing assumptions, are too small. Or in other words, this would raise the cost to affected industries of meeting the control requirements of the Scenario.

The effect of the assumptions we have taken, however, is to channel most of the additional demands for fabricated investment goods into Ontario. Some leaks out in the form of imports from non-Canadian suppliers, and some will leak out in the form of imports from other provinces, but given small import elasticities, and the concentration of durables manufacturing within the country in Ontario, these amounts will be relatively small. Note, however, that the magnitude and concentration of additional demands across a small number of suppliers in a short period of time may constitute a supply problem. See the section on Implications for the Ontario Environmental Protection Industry for a further discussion of this.

One thing to note, however, is that Ontario suppliers of environmental protection equipment will, like all other firms in the province, face induced increases in costs of production. These increases will grow over time as directly affected iron and steel, refineries, and other producers attempt to pass their added costs on in the form of higher prices. In many cases, where Ontario firms have a dominant position in the Canadian market, these cost impacts will spread across the country. But in some cases, as for example, in the case of electric power rates, the increases will have to be borne uniquely by Ontario firms, including those in the environmental protection industry. On balance, this indicates a small loss in competitiveness within the Canadian market for Ontario environmental protection firms. Our assumptions do not attempt to measure this influence, or reflect it, and in degree as this is so, we have probably channeled slightly too much of the additional demand to Ontario suppliers. This is a third-order omission, however, and should not affect the sectoral or over-all results by much.

On the negative impact side, the assumption that directly affected producers will attempt to pass their costs on in the form of higher prices is the principal consideration. Seen regionally, there are direct and indirect implications. Higher prices will lead to loss of competitiveness for Ontario firms in foreign and other-Canadian markets, which will be reflected in lost sales and production volumes. These higher prices will also induce higher costs of production for enterprises that use their outputs (regardless of the Canadian location of the user), will reduce the real incomes of Ontario consumers, and should over time induce higher nominal wage rates for producers throughout the country.

There are no data available in Canada that would allow us to evaluate all of these transmission mechanisms. To reflect these several influences, however, we have assumed that the direct loss of market-measured, value added indicated by the additional current expenditures are channeled to Ontario firms. But we have assumed that induced losses of output in the directly affected sectors, and all losses for goods producers in sectors that are not directly affected are shared across the country in proportion to Base Case shares. We judge that this procedure biases the results in that the loss of competitiveness for Ontario firms in all sectors may not be fully captured, and in degree as this is so, may understate the negative consequences for the province.

Review of the effects on the petroleum and coal refining sector will help to illustrate this. In the Scenario A results, the Ontario segment of the sector generally faces a negative impact, measured in volume terms, that is close to the national effect. And of course, the per cent impact on the Ontario sector is much more severe than for the sector nationally. Arguably, the Ontario portion of the sector could be harmed much more than is indicated by these results since its costs of production will clearly increase by far more than producers in other provinces, and it could lose part of its Base-Case market share, an assumption we do not make directly.

All things considered, the procedure goes a significant way towards locating negative effects in Ontario, but it may not be enough. Again, no data (and therefore, no models) exist to isolate these influences and we have no way of estimating how much bias there is. Our best judgment is that there is some, but it is unlikely to be so severe as to change the overall character of the results.

Finally, it should be noted that we have located the additional employment derived from additional abatement and monitoring operating costs in Ontario, since we know they will have to be located there. This tends to minimize the negative effects on *ex post* total, provincial employment that follow from reduced output. It also tends to minimize population out migration from Ontario that would follow from reduced employment opportunities in the province. This in turn, minimizes negative effects on the Ontario private and public services sectors that are population sensitive. We are confident that this set of mechanisms is reasonable, although one could of course question the basic migration parameters.

4 RESULTS

4.1 National Results And Transmission Of Effects To Sectors

As was detailed earlier in this report, our research method begins with a simulation of national, Canadian impacts. This spatial level permits us to bring a full set of detailed data, and models of behaviour, that can encompass demand, output, income, and price/cost implications of the various scenarios. It also recognizes the fact that a program introduced in Ontario alone will have effects in other provinces.

The graphics amd tabulations on the following five pages summarize the implications of each of the scenarios for the national economy, Appendix E provides a more complete tabulation of effects, including details on the output and employment of producing sectors.

Figure 1

National Impacts
(in per cent change from Base Case)

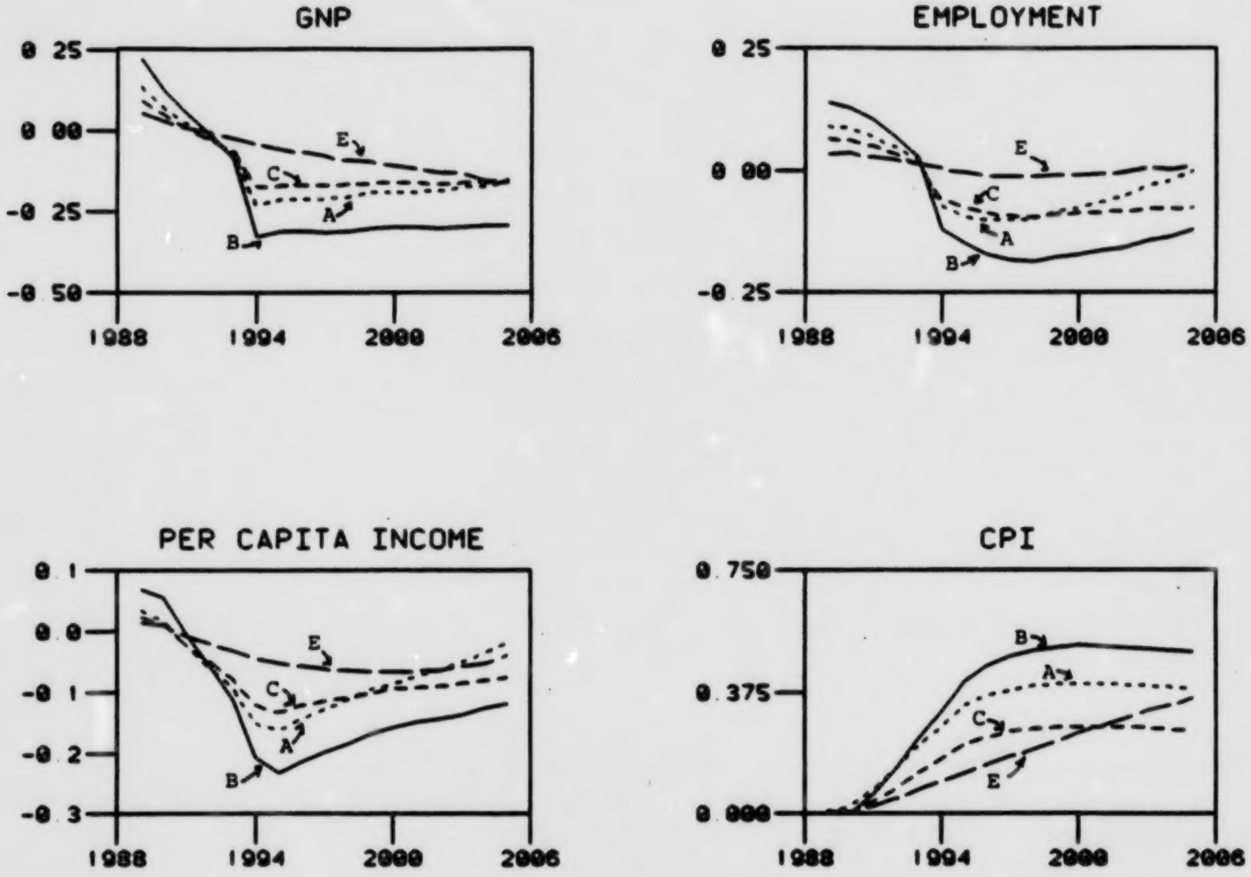


Table 4

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario A,		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.15	0.10	0.20	0.30	0.37
Price		0.01	0.03	0.28	0.51	0.53
Volume		0.13	0.07	-0.07	-0.20	-0.16
*** Volumes ***						
Consumption Expenditure		0.02	0.01	-0.08	-0.12	-0.04
Durables		0.04	0.01	-0.12	-0.13	-0.01
Other		0.02	0.01	-0.07	-0.12	-0.05
Government Expenditure		0.12	0.12	0.20	0.22	0.50
Current		0.06	0.06	0.16	0.26	0.59
Capital		0.51	0.46	0.41	0.03	0.09
Business Investment		0.69	0.74	0.52	-0.10	0.03
Residential		0.02	0.04	0.06	-0.08	-0.01
Nonresidential		0.91	0.98	0.66	-0.11	0.03
Inventory Change	(a)	78	-15	-46	10	3
Net Exports	(a)	-142	-163	-268	-326	-568
Exports		-0.03	-0.05	-0.14	-0.21	-0.23
Merchandise		-0.03	-0.05	-0.14	-0.23	-0.25
Services		0.00	-0.02	-0.09	-0.12	-0.09
Imports		0.25	0.27	0.33	0.29	0.51
Merchandise		0.27	0.27	0.29	0.19	0.29
Services		0.18	0.26	0.44	0.57	1.25
*** Labour Market ***						
Labour Force		0.01	0.00	-0.01	0.01	0.03
Employment		0.09	0.09	0.02	-0.10	0.00
Unemployment		-0.93	-0.93	-0.41	1.23	0.52
Unemployment Rate (%)	(a)	-0.08	-0.08	-0.03	0.10	0.03
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.03	-0.01	0.14	0.41	0.43
Output per Employee ($71)		0.04	-0.01	-0.09	-0.08	-0.11
Priv. Non-Agr Unit Lab. Cost		-0.02	-0.01	0.22	0.46	0.45
Impl. Deflator of Imports		0.01	0.01	-0.02	-0.02	-0.02
Implicit Output Deflator		0.02	0.04	0.29	0.52	0.55
Consumer Price Index		0.01	0.02	0.20	0.39	0.39
*** Incomes ***						
Disposable Income/Capita		0.03	0.02	-0.09	-0.11	-0.02
Corporate Profits		0.23	0.06	0.09	0.41	0.42
Government Balances (Mn $C)						
All-Governments	(a)	317	125	-122	-891	-2372
Federal	(a)	309	141	239	85	630
Non-Federal	(a)	16	0	-359	-987	-3006
Current Account Balance	(a)	-478	-539	-741	-867	-2606
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.00	0.03	0.16	0.25	0.25
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.00	0.00

(a) Level Impact

Table 5

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario B,		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.23	0.14	0.24	0.35	0.36
Price		0.01	0.02	0.33	0.66	0.65
Volume		0.22	0.12	-0.09	-0.31	-0.29
*** Volumes ***						
Consumption Expenditure		0.04	0.04	-0.09	-0.19	-0.14
Durables		0.08	0.06	-0.12	-0.20	-0.12
Other		0.03	0.03	-0.08	-0.18	-0.14
Government Expenditure		0.15	0.12	0.15	0.11	0.27
Current		0.06	0.04	0.08	0.13	0.32
Capital		0.73	0.64	0.54	0.00	0.00
Business Investment		1.15	1.23	0.91	-0.10	0.04
Residential		0.02	0.04	0.09	-0.11	-0.03
Nonresidential		1.53	1.62	1.16	-0.09	0.05
Inventory Change	(a)	132	-15	-62	9	-1
Net Exports	(a)	-239	-266	-403	-433	-663
Exports		-0.08	-0.14	-0.32	-0.42	-0.40
Merchandise		-0.10	-0.16	-0.35	-0.47	-0.45
Services		0.00	-0.02	-0.13	-0.16	-0.12
Imports		0.38	0.37	0.38	0.23	0.45
Merchandise		0.41	0.36	0.29	0.08	0.20
Services		0.30	0.40	0.63	0.67	1.29
*** Labour Market ***						
Labour Force		0.01	-0.01	-0.03	0.01	0.02
Employment		0.14	0.13	0.03	-0.19	-0.12
Unemployment		-1.43	-1.39	-0.61	2.07	1.97
Unemployment Rate (%)	(a)	-0.12	-0.12	-0.05	0.18	0.13
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.04	-0.04	0.14	0.50	0.47
Output per Employee ($71)		0.08	-0.01	-0.10	-0.09	-0.11
Priv. Non-Agr Unit Lab. Cost		-0.05	-0.05	0.24	0.59	0.54
Impl. Deflator of Imports		-0.01	-0.03	-0.08	-0.09	-0.07
Implicit Output Deflator		0.03	0.04	0.35	0.67	0.67
Consumer Price Index		0.00	0.00	0.23	0.50	0.50
*** Incomes ***						
Disposable Income/Capita		0.07	0.06	-0.11	-0.18	-0.12
Corporate Profits		0.37	0.01	-0.05	0.61	0.85
Government Balances (Mn $C)						
All-Governments	(a)	529	247	76	-938	-2600
Federal	(a)	465	177	307	4	296
Non-Federal	(a)	70	85	-231	-955	-2901
Current Account Balance	(a)	-760	-804	-980	-851	-2484
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.04	0.10	0.33	0.46	0.41
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.01	0.00

(a) Level Impact

Table 6

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario C,		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.10	0.06	0.12	0.18	0.18
Price		0.01	0.02	0.18	0.35	0.34
Volume		0.09	0.05	-0.06	-0.17	-0.16
*** Volumes ***						
Consumption Expenditure		0.01	0.01	-0.06	-0.11	-0.08
Durables		0.03	0.01	-0.09	-0.12	-0.08
Other		0.01	0.01	-0.05	-0.10	-0.08
Government Expenditure		0.08	0.06	0.05	0.02	0.08
Current		0.04	0.02	0.03	0.04	0.10
Capital		0.32	0.27	0.19	-0.03	-0.04
Business Investment		0.48	0.53	0.38	-0.07	0.02
Residential		0.01	0.02	0.04	-0.06	-0.02
Nonresidential		0.64	0.69	0.48	-0.07	0.02
Inventory Change	(a)	56	-10	-33	5	-1
Net Exports	(a)	-99	-113	-176	-204	-326
Exports		-0.02	-0.03	-0.10	-0.15	-0.17
Merchandise		-0.02	-0.04	-0.11	-0.17	-0.19
Services		0.00	0.00	-0.05	-0.07	-0.05
Imports		0.17	0.18	0.21	0.16	0.25
Merchandise		0.19	0.19	0.19	0.10	0.14
Services		0.12	0.17	0.27	0.32	0.65
*** Labour Market ***						
Labour Force		0.00	0.00	-0.02	0.00	0.01
Employment		0.06	0.06	0.01	-0.09	-0.07
Unemployment		-0.66	-0.68	-0.33	1.01	1.13
Unemployment Rate (%)	(a)	-0.05	-0.06	-0.03	0.09	0.08
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.02	-0.02	0.06	0.25	0.24
Output per Employee ($71)		0.03	-0.01	-0.07	-0.06	-0.06
Priv. Non-Agr Unit Lab. Cost		-0.02	-0.01	0.13	0.31	0.29
Impl. Deflator of Imports		0.00	0.00	-0.02	-0.03	-0.02
Implicit Output Deflator		0.01	0.02	0.19	0.35	0.35
Consumer Price Index		0.00	0.01	0.12	0.26	0.26
*** Incomes ***						
Disposable Income/Capita		0.02	0.01	-0.08	-0.11	-0.08
Corporate Profits		0.15	0.01	0.02	0.34	0.50
Government Balances (Mn $C)						
All-Governments	(a)	239	124	50	-439	-1244
Federal	(a)	215	100	154	13	150
Non-Federal	(a)	29	40	-103	-463	-1399
Current Account Balance	(a)	-331	-368	-455	-448	-1268
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.00	0.02	0.13	0.19	0.19
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.00	0.00

(a) Level Impact

Table 7

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario E,		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.06	0.04	0.08	0.18	0.34
Price		0.00	0.01	0.10	0.27	0.49
Volume		0.05	0.03	-0.02	-0.09	-0.15
*** Volumes ***						
Consumption Expenditure		0.01	0.00	-0.03	-0.06	-0.05
Durables		0.01	0.00	-0.04	-0.08	-0.04
Other		0.01	0.00	-0.02	-0.06	-0.05
Government Expenditure		0.05	0.05	0.08	0.17	0.48
Current		0.02	0.02	0.06	0.17	0.55
Capital		0.19	0.18	0.16	0.15	0.14
Business Investment		0.26	0.28	0.21	0.11	0.01
Residential		0.01	0.01	0.02	-0.01	-0.01
Nonresidential		0.34	0.37	0.26	0.14	0.01
Inventory Change	(a)	30	-4	-16	-11	-6
Net Exports	(a)	-52	-60	-99	-211	-493
Exports		-0.01	-0.02	-0.05	-0.12	-0.21
Merchandise		-0.01	-0.02	-0.06	-0.13	-0.23
Services		0.00	-0.01	-0.03	-0.06	-0.08
Imports		0.09	0.10	0.12	0.20	0.43
Merchandise		0.10	0.10	0.11	0.15	0.28
Services		0.07	0.09	0.16	0.35	0.93
*** Labour Market ***						
Labour Force		0.00	0.00	-0.01	0.00	0.02
Employment		0.03	0.03	0.01	-0.01	0.01
Unemployment		-0.35	-0.36	-0.19	0.16	0.19
Unemployment Rate (%)	(a)	-0.03	-0.03	-0.02	0.01	0.01
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.01	-0.01	0.05	0.18	0.38
Output per Employee ($71)		0.02	0.00	-0.03	-0.06	-0.13
Priv. Non-Agr Unit Lab. Cost		-0.01	-0.01	0.07	0.23	0.44
Impl. Deflator of Imports		0.00	0.00	-0.01	-0.02	-0.03
Implicit Output Deflator		0.01	0.01	0.10	0.27	0.51
Consumer Price Index		0.00	0.01	0.07	0.20	0.35
*** Incomes ***						
Disposable Income/Capita		0.01	0.01	-0.03	-0.06	-0.04
Corporate Profits		0.09	0.01	0.04	0.16	0.22
Government Balances (Mn $C)						
All-Governments	(a)	121	50	-34	-354	-1744
Federal	(a)	121	72	98	168	655
Non-Federal	(a)	6	-1	-131	-533	-2403
Current Account Balance	(a)	-176	-200	-274	-613	-2157
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.00	0.01	0.06	0.15	0.24
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.00	0.00

(a) Level Impact

While impacts are available for each year of 1989-2005, we report impacts only for 1989 and 1990, to provide a view of the initial impacts, 1993 to report the impacts after completion of the program in Scenarios A, B, and C, 1998, to provide a view after ten years, and 2005 to provide an estimate of long-term effects for Scenarios A, B, and C, and to capture results of Scenario E at the point when it is almost completed.

As inspection of the Tables 4-7 will reveal, our results suggest positive effects for the Canadian economy in all Scenarios during the initial years. This follows from the dominant effects of increased business and government investment in abatement and monitoring structures and equipment. In the tabulations, this impact is recorded as increases in "Government Expenditure: Capital" and "Business Investment: Nonresidential". These impacts, which include the additional spending directly caused by the revisions to regulations, and that which is induced (positively or negatively) in all industries by the full effects of the regulations.

These results indicate that investment by business in structures and in machinery and equipment would be increased by as much as 1.5 per cent in Scenario B through most of the first five years, and by as little as an average 0.7 per cent in Scenario C. Scenario A has effects that are intermediate to these. The positive effects in Scenario E are smaller (0.4 per cent initially), but are longer lasting since the direct effects of the program are not completed until well into the first decade of the next Century. The proportional increases in capital spending by the public sector are smaller, but nevertheless notably positive. Increased current expenses of government reflect increased ministry and municipal waste disposal operating costs, and the depreciation of public-sector abatement and monitoring capital.

Efforts of directly affected businesses to pass increased costs on in the form of higher prices are reflected in the impacts on the "Implicit Output Deflator" reported in the tabulations. These also, however, reflect the induced increases in wage rates, and lower labour productivity, which with the increase in wages yields higher unit labour costs. Corporate profits are increased in nominal terms, but by less than the increases of total GNP denominated in the same terms.

As measured by changes in the implicit output deflator, prices over the long term (by 2005) are increased by a low of 0.3 per cent in Scenario C to a high of 0.6 per cent in Scenario B. Scenarios A and E yield an intermediate (0.5 per cent) result. These positive effects on prices gather strength slowly over time, but in Cases A, B and C rise somewhat more quickly during 1989-93, reflecting the five-year staging assumed for the scenarios.

Prices faced by consumers are also increased, but by a slightly more modest amount than aggregate producer prices. Increased consumer prices lead to reduced real disposable income, which in per capita terms, rises initially in all cases, but in the longer term, is reduced in all cases. The pattern of effects on disposable incomes leads to similar positive and then negative effects on consumption. For the most part, purchases of durables are more sensitive than other consumer items, reflecting differential income elasticities and relative price effects of the program on various consumer goods and services.

The loss of "competitiveness" for Canadian producers that is reflected in higher unit labour costs has foreign trade consequences. In all cases, exports are reduced and imports increased. In the nearer term of cases A, B, and C, increased imports also reflect the fact that part of the increased abatement and monitoring investment in equipment would directly or indirectly be supplied through imports. The reduction in exports would be generalized among almost all trade categories. Most categories of imports could be expected to rise, but some would decline, including some that are produced mainly by directly affected industries. This follows in the longer term from reduced final or inter-industry demands as the size of the economy shrinks. Net of these considerations, the current account balance is worsened in all cases, and from the beginning. This implies there would be an increase in the need for foreign savings in either debt or equity form.

The implications of these changes in demands on the economy for production are reported in the tabulations on the following four pages. In the early years, especially in Scenarios A, B, and C, the dominating effects of increased abatement and monitoring investment in structures and equipment is reflected in notably positive effects on the construction sector and durables manufacturing, especially the iron and steel industry, metal fabricators, and producers of machinery. Benefits to other sectors reflect indirect demands on them of these industries, and gains induced by generalized income and consumer gains.

These effects are soon dissipated, or more than offset by the negative implications for demand of increasing costs and prices. Again, these negative effects should be widespread, reflecting the spreading of increased wage and material input costs throughout the economy, and the reduction in demand for services that follows from reduced activity of goods producers and diminished consumer incomes. As a general rule, there are negative effects on "private" service sectors, while "public" sector output is increased. This partly reflects increased spending of hospitals. Increased output of "public" administration reflects mainly increased Ministry expenditures, and operating expenditures faced by the municipalities.

Table 8

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario A,	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.13	0.07	-0.06	-0.18	-0.11
Agriculture	0.11	-0.05	-0.16	-0.17	-0.11
Fisheries	0.01	-0.06	-0.54	-0.84	-0.77
Forestry	0.17	0.09	-0.12	-0.40	-0.38
Mining	-0.11	-0.20	-0.42	-0.28	-0.28
Manufacturing	0.25	0.03	-0.37	-0.60	-0.57
Durables	0.41	0.16	-0.17	-0.49	-0.50
Non-Durables	0.06	-0.11	-0.63	-0.74	-0.67
Utilities	0.22	0.35	0.72	0.68	0.78
Construction	0.34	0.36	0.25	-0.11	0.02
Transport, Storage & Comm.	0.14	0.11	0.00	-0.14	-0.06
Trade	0.14	0.11	-0.02	-0.15	-0.06
Finance, Insur. & Real Est	0.05	0.03	-0.04	-0.06	-0.05
less Royalties	-0.04	0.02	-0.05	-0.07	-0.05
Services	0.04	0.03	-0.04	-0.12	-0.06
Housing	0.00	0.00	0.02	0.01	-0.01
Public Administration	0.07	0.08	0.21	0.35	0.82
Special Aggregations					
Goods-Producing	0.19	0.00	-0.36	-0.53	-0.51
Services	0.11	0.10	0.05	-0.04	0.06
Private	0.12	0.11	0.04	-0.08	-0.02
less Housing	0.13	0.12	0.04	-0.09	-0.02
Public	0.04	0.05	0.10	0.16	0.38
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

Table 9

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario B,	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.21	0.12	-0.07	-0.28	-0.23
Agriculture	0.19	-0.05	-0.21	-0.26	-0.21
Fisheries	0.04	-0.01	-0.62	-1.09	-1.00
Forestry	0.25	0.14	-0.16	-0.57	-0.55
Mining	-0.16	-0.28	-0.55	-0.36	-0.35
Manufacturing	0.48	0.18	-0.35	-0.75	-0.73
Durables	0.76	0.41	-0.05	-0.60	-0.63
Non-Durables	0.15	-0.08	-0.73	-0.94	-0.87
Utilities	0.26	0.38	0.72	0.62	0.67
Construction	0.48	0.50	0.35	-0.16	-0.03
Transport, Storage & Comm.	0.21	0.15	-0.02	-0.27	-0.21
Trade	0.23	0.19	0.00	-0.22	-0.16
Finance, Insur. & Real Est	0.08	0.04	-0.06	-0.10	-0.09
less Royalties	0.07	0.03	-0.06	-0.11	-0.09
Services	0.06	0.03	-0.08	-0.22	-0.17
Housing	0.00	0.00	0.02	0.01	-0.01
Public Administration	0.06	0.05	0.09	0.17	0.43
Special Aggregations					
Goods-Producing	0.38	0.11	-0.36	-0.67	-0.65
Services	0.15	0.13	0.04	-0.12	-0.06
Private	0.18	0.16	0.04	-0.17	-0.12
less Housing	0.20	0.17	0.04	-0.18	-0.12
Public	0.04	0.03	0.04	0.06	0.19
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

Table 10

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario C,	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.09	0.05	-0.05	-0.15	-0.13
Agriculture	0.08	-0.03	-0.12	-0.14	-0.12
Fisheries	0.01	-0.03	-0.35	-0.59	-0.53
Forestry	0.12	0.07	-0.09	-0.30	-0.29
Mining	-0.08	-0.14	-0.28	-0.19	-0.18
Manufacturing	0.17	0.02	-0.27	-0.44	-0.43
Durables	0.27	0.08	-0.19	-0.43	-0.43
Non-Durables	0.06	-0.04	-0.36	-0.46	-0.42
Utilities	0.16	0.26	0.53	0.50	0.55
Construction	0.22	0.23	0.14	-0.10	-0.03
Transport, Storage & Comm.	0.10	0.08	0.00	-0.13	-0.10
Trade	0.10	0.08	-0.02	-0.12	-0.09
Finance, Insur. & Real Est	0.04	0.02	-0.03	-0.05	-0.04
less Royalties	0.03	0.01	-0.04	-0.06	-0.05
Services	0.03	0.02	-0.03	-0.10	-0.09
Housing	0.00	0.00	0.01	0.00	-0.01
Public Administration	0.04	0.02	0.02	0.04	0.13
Special Aggregations					
Goods-Producing	0.14	0.00	-0.25	-0.39	-0.38
Services	0.07	0.07	0.02	-0.06	-0.03
Private	0.09	0.08	0.03	-0.07	-0.05
less Housing	0.09	0.09	0.03	-0.08	-0.05
Public	0.02	0.01	0.01	0.00	0.05
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

Table 11

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario E,	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.05	0.03	-0.02	-0.08	-0.11
Agriculture	0.04	-0.01	-0.06	-0.11	-0.12
Fisheries	0.00	-0.01	-0.20	-0.48	-0.79
Forestry	0.06	0.04	-0.04	-0.18	-0.36
Mining	-0.02	-0.05	-0.13	-0.19	-0.29
Manufacturing	0.10	0.02	-0.13	-0.33	-0.57
Durables	0.15	0.07	-0.06	-0.24	-0.49
Non-Durables	0.03	-0.03	-0.22	-0.44	-0.68
Utilities	0.09	0.14	0.28	0.49	0.76
Construction	0.13	0.14	0.09	0.04	0.01
Transport, Storage & Comm.	0.05	0.04	0.01	-0.04	-0.06
Trade	0.05	0.04	0.00	-0.06	-0.08
Finance, Insur. & Real Est	0.02	0.01	-0.01	-0.04	-0.06
less Royalties	0.02	0.01	-0.02	-0.04	-0.06
Services	0.02	0.01	-0.01	-0.05	-0.05
Housing	0.00	0.00	0.01	0.01	0.00
Public Administration	0.03	0.03	0.08	0.23	0.77
Special Aggregations					
Goods-Producing	0.08	0.01	-0.12	-0.30	-0.51
Services	0.04	0.04	0.02	0.01	0.05
Private	0.05	0.04	0.02	-0.01	-0.02
less Housing	0.05	0.05	0.02	-0.02	-0.02
Public	0.02	0.02	0.04	0.11	0.36
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

Of the directly affected manufacturing industries, these results indicate that the long-term, unfavourable effects of increased abatement and monitoring costs on output would be most significant for the petroleum refining and chemicals sectors. While this will vary from Scenario to Scenario, details of the impact on individual industries reported in Appendix E for Scenario B are indicative. In that case, output in these two industries is reduced by 5-6 per cent from Base Case amounts by 1993, and for all years thereafter. Output in the automotive assembly and non-metallic minerals industries is reduced by about 1.5 per cent. This reduction is achieved by as early as 1993 for autos but takes longer in the case of non-metallic minerals producers. These latter industries experience offsetting benefits in the form of demand for their products from continuing, albeit modest, investments in abatement structures.

For other directly-affected manufacturers, reductions in output are approximately equivalent to the average reductions for all of manufacturing. Indeed, the widespread reductions across almost all manufacturing industries is a notable result.

Increased output of the utilities sector reflects the effects of relative price effects. This sector is composed of the output of electric power producers, natural gas distribution utilities, and municipal water and sewage. Electric power prices are increased in each of the scenarios in varying degree as it is assumed that the Ontario segment of the industry passes on regulation-related costs. But these increases are far smaller than those that will be passed on by refiners for fuel oil and other close substitutes for power. As well, of course, there are no direct cost increases faced by the distributors of natural gas. Accordingly, these results suggest a consumer (and industry) substitution away from refinery products to electric power and natural gas, in sufficient amount to more than offset the negative effects on demand of increased power costs and prices.

The pattern of effects on output are reflected in the impacts on employment. In all cases, there are positive effects on employment initially, with a tendency for negative effects in the longer term. Initial positive effects on employment mainly reflect increased demands for construction labour, and that which is employed in the machinery and other manufacturing industries that supply the abatement and monitoring equipment. As measured by the impact on the total, the long-term effects on employment are less severe than those on output. This reflects the offsetting benefits to employment of directly adding 6,000-9,000 to operate the abatement and monitoring equipment.

This total effect does, of course, mask adjustments that would occur in firms and within industries, as regulation-related employment substitutes for regular production employees. Indeed, our results suggest that employment in the directly affected industries would be little changed, or would be increased. Net negative effects, thus, are borne in large measure by employment in other industries.

4.2 Ontario Results

Impacts on the province of Ontario are summarized in the graphics and tabulations on the following five pages; the tables report per cent impacts for total output, labour markets, and real incomes. Effects on major sectors of the province are indicated. Full industrial detail is provided in the tabulations included in Appendix F. Impacts on other provinces are indicated in Appendix G.

These results suggest that long-term, overall impacts would be stronger in Ontario than for the country as a whole. As a rule, between one-half and two-thirds of the initial (first-year) positive effects on the Canada total are located in Ontario. Notice in Appendix G, however, that some of the benefits would spill over into other provinces since their suppliers would directly or indirectly be involved in the supply of the investment goods, and all of their industries would benefit from increased incomes in Ontario and improved real incomes in their own provinces. The disproportionately large, positive effect in Ontario is quickly eroded, however, as Ontario producers lose competitiveness and as negative effects on market-measured real incomes of the Ontario population begin to reduce their demands. The net effects remain positive, but very small in the second year. After that, negative effects begin to dominate Ontario.

In fact, these results suggest that negative effects, in absolute terms, would be larger in Ontario than for the country as a whole beginning as early as the third or fourth year and continuing into the future in all scenarios. In short, these results suggest that Ontario's aggregate output would be reduced while there should be increases in most, if not all of the rest of the country. These results suggest that Quebec and Manitoba would be "benefited" most, reflecting the fact that their economic base contains a significant portion of alternative supplies of manufacturing and the fact that they are most likely to benefit from population out flows from Ontario.

Figure 2

Ontario Impacts
(in per cent change from Base Case)

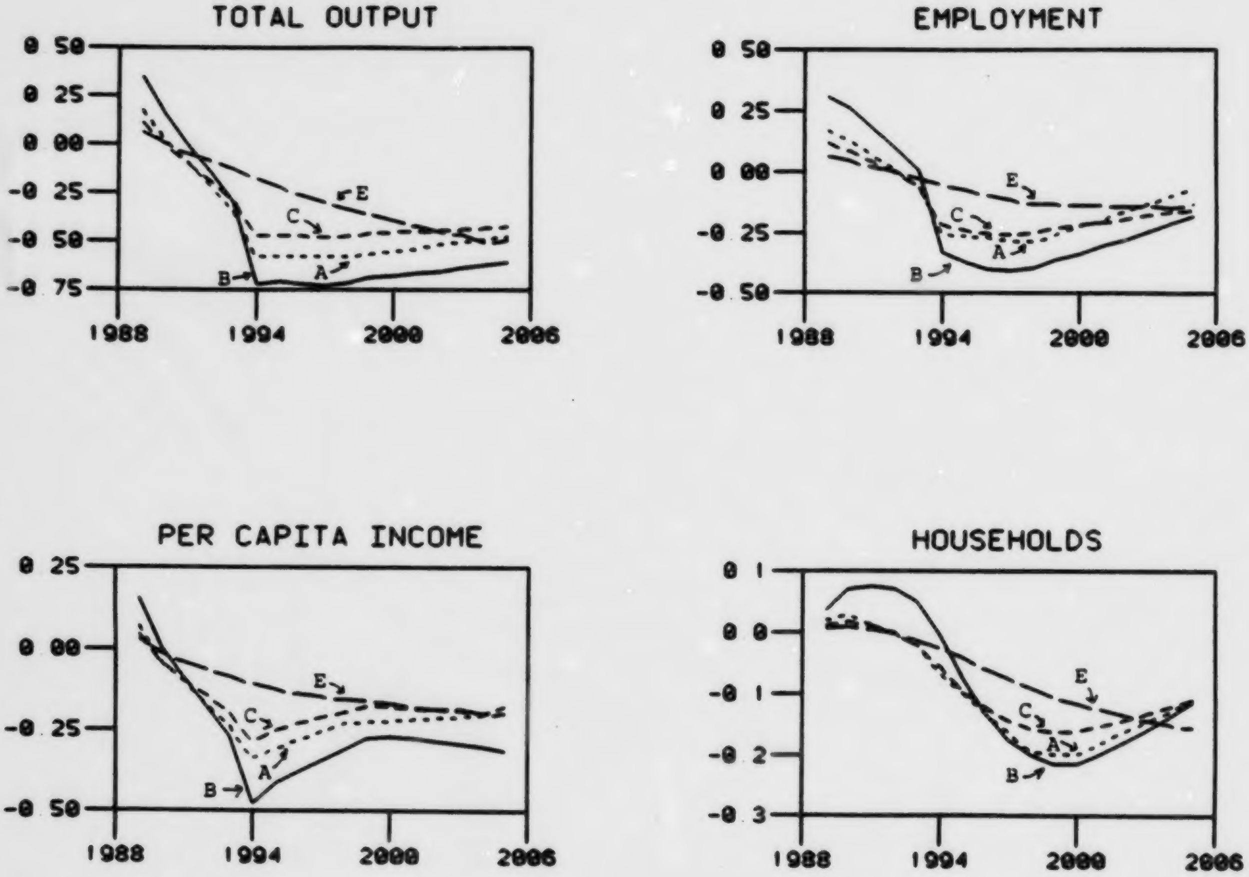


Table 12

Major Indicators for Ontario

Scenario A	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.18	0.03	-0.34	-0.58	-0.47
Agriculture	0.13	-0.05	-0.16	-0.12	0.03
Resource Extraction	-0.37	-0.50	-0.91	-0.56	-0.64
Manufacturing	0.19	-0.15	-0.74	-0.98	-0.94
Electrical Products	0.25	0.06	-0.21	-0.55	-0.58
Motor Vehicles	-0.02	-0.28	-0.58	-0.65	-0.58
Parts & Accessories	0.60	0.37	0.30	0.15	0.09
Primary Metals	-0.19	-1.24	-2.91	-3.22	-3.33
Utilities	0.22	0.20	0.16	-0.05	0.15
Electrical	0.25	0.23	0.22	-0.03	0.11
Comm. & Personal Services	0.07	0.03	-0.16	-0.40	-0.28
Employment					
Total	0.17	0.13	-0.06	-0.29	-0.07
Agriculture	0.10	0.01	-0.17	-0.19	-0.13
Resource Extraction	-0.19	-0.19	-0.29	-0.11	-0.29
Manufacturing	0.23	0.19	0.04	-0.17	-0.03
Durables	0.36	0.36	0.34	0.06	0.09
Nondurables	0.06	-0.02	-0.38	-0.49	-0.22
Utilities	0.16	0.18	0.23	0.10	0.23
Comm. & Personal Services	0.08	0.05	-0.10	-0.29	-0.04
GDP($71) per employed worker	0.00	-0.10	-0.27	-0.29	-0.40
Investment ($71)					
Nonresidential Structures	1.82	1.90	0.96	-0.46	-0.15
Manufacturing	11.48	12.72	7.59	-1.84	-0.61
Utilities	0.80	0.69	0.28	-0.85	-0.50
Machinery and Equipment	2.24	2.19	1.54	-0.30	-0.16
Residential Structures	0.18	0.23	-0.28	-0.78	0.15
Labour Force	0.07	0.03	-0.08	-0.19	-0.06
Households	0.02	0.03	-0.02	-0.20	-0.11
Unemployment	-1.82	-1.39	-0.38	1.64	0.26
Personal Income per Household ($K)	0.07	-0.04	-0.24	-0.23	-0.20
Labour Income per employed worker ($K)	-0.01	-0.10	-0.20	-0.17	-0.21

(a) Level Impact

Table 13

Major Indicators for Ontario

Scenario B	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.35	0.16	-0.30	-0.71	-0.61
Agriculture	0.22	-0.05	-0.21	-0.22	-0.09
Resource Extraction	-0.49	-0.64	-1.15	-0.68	-0.75
Manufacturing	0.45	0.02	-0.71	-1.14	-1.10
Electrical Products	0.54	0.25	-0.13	-0.72	-0.75
Motor Vehicles	-0.37	-1.13	-1.86	-1.87	-1.40
Parts & Accessories	1.62	1.70	1.64	1.26	0.84
Primary Metals	0.22	-0.95	-2.70	-3.18	-3.35
Utilities	0.30	0.20	-0.05	-0.40	-0.18
Electrical	0.33	0.21	-0.04	-0.43	-0.21
Comm. & Personal Services	0.13	0.08	-0.15	-0.52	-0.41
Employment					
Total	0.30	0.26	0.00	-0.40	-0.19
Agriculture	0.17	0.03	-0.22	-0.32	-0.26
Resource Extraction	-0.25	-0.26	-0.46	-0.24	-0.45
Manufacturing	0.42	0.37	0.13	-0.25	-0.08
Durables	0.64	0.63	0.53	0.04	0.13
Nondurables	0.12	0.02	-0.42	-0.65	-0.38
Utilities	0.23	0.22	0.15	-0.11	0.05
Comm. & Personal Services	0.14	0.11	-0.07	-0.38	-0.14
GDP($71) per employed worker	0.04	-0.10	-0.31	-0.32	-0.42
Investment ($71)					
Nonresidential Structures	2.73	2.95	1.77	-0.52	-0.17
Manufacturing	15.98	18.08	12.18	-1.75	-0.67
Utilities	2.10	1.96	1.29	-1.11	-0.59
Machinery and Equipment	4.48	4.35	3.24	-0.13	-0.06
Residential Structures	0.37	0.57	-0.04	-1.04	0.20
Labour Force	0.13	0.10	-0.03	-0.21	-0.08
Households	0.03	0.07	0.05	-0.20	-0.12
Unemployment	-2.96	-2.23	-0.61	3.12	3.46
Personal Income per Household ($K)	0.16	0.00	-0.27	-0.31	-0.31
Labour Income per employed worker ($K)	0.00	-0.10	-0.23	-0.19	-0.28

(a) Level Impact

Table 14

Major Indicators for Ontario

Scenario C	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.11	0.00	-0.28	-0.47	-0.42
Agriculture	0.10	-0.03	-0.12	-0.08	0.02
Resource Extraction	-0.28	-0.35	-0.56	-0.26	-0.28
Manufacturing	0.11	-0.14	-0.59	-0.78	-0.76
Electrical Products	0.15	0.01	-0.19	-0.42	-0.42
Motor Vehicles	-0.03	-0.22	-0.44	-0.49	-0.43
Parts & Accessories	0.43	0.28	0.22	0.12	0.08
Primary Metals	-0.44	-1.51	-3.32	-3.56	-3.74
Utilities	0.18	0.19	0.22	0.05	0.12
Electrical	0.22	0.24	0.33	0.15	0.22
Comm. & Personal Services	0.05	0.01	-0.13	-0.32	-0.27
Employment					
Total	0.12	0.08	-0.06	-0.25	-0.15
Agriculture	0.07	0.01	-0.12	-0.13	-0.08
Resource Extraction	-0.19	-0.21	-0.39	-0.29	-0.42
Manufacturing	0.18	0.18	0.13	-0.01	0.09
Durables	0.26	0.28	0.33	0.17	0.22
Nondurables	0.07	0.04	-0.15	-0.26	-0.10
Utilities	0.12	0.15	0.20	0.08	0.11
Comm. & Personal Services	0.05	0.02	-0.12	-0.30	-0.21
GDP($71) per employed worker	0.00	-0.09	-0.22	-0.22	-0.26
Investment ($71)					
Nonresidential Structures	1.20	1.25	0.58	-0.35	-0.14
Manufacturing	8.17	9.06	5.50	-1.29	-0.46
Utilities	0.02	-0.05	-0.26	-0.56	-0.34
Machinery and Equipment	1.60	1.57	1.09	-0.25	-0.14
Residential Structures	0.12	0.14	-0.25	-0.61	0.04
Labour Force	0.04	0.01	-0.08	-0.16	-0.09
Households	0.01	0.02	-0.02	-0.16	-0.11
Unemployment	-1.28	-1.02	-0.34	1.39	1.87
Personal Income per Household ($K)	0.05	-0.04	-0.20	-0.20	-0.20
Labour Income per employed worker ($K)	-0.02	-0.08	-0.18	-0.14	-0.19

(a) Level Impact

Table 15

Major Indicators for Ontario

Scenario E	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.06	0.01	-0.13	-0.34	-0.50
Agriculture	0.05	0.00	-0.05	-0.05	0.01
Resource Extraction	-0.08	-0.12	-0.27	-0.42	-0.64
Manufacturing	0.06	-0.06	-0.28	-0.61	-0.95
Electrical Products	0.09	0.03	-0.07	-0.27	-0.56
Motor Vehicles	-0.02	-0.13	-0.24	-0.43	-0.55
Parts & Accessories	0.24	0.16	0.13	0.15	0.09
Primary Metals	-0.11	-0.52	-1.17	-2.31	-3.40
Utilities	0.08	0.08	0.07	0.03	0.09
Electrical	0.10	0.09	0.10	0.05	0.05
Comm. & Personal Services	0.03	0.01	-0.06	-0.21	-0.31
Employment					
Total	0.06	0.04	-0.03	-0.13	-0.13
Agriculture	0.04	0.02	-0.05	-0.04	-0.03
Resource Extraction	-0.05	-0.04	-0.08	-0.09	-0.19
Manufacturing	0.08	0.07	0.01	-0.04	-0.05
Durables	0.12	0.12	0.12	0.12	0.12
Nondurables	0.02	-0.01	-0.14	-0.26	-0.31
Utilities	0.06	0.07	0.09	0.09	0.16
Comm. & Personal Services	0.03	0.01	-0.05	-0.16	-0.15
GDP($71) per employed worker	0.00	-0.04	-0.10	-0.20	-0.36
Investment ($71)					
Nonresidential Structures	0.68	0.71	0.36	0.07	-0.21
Manufacturing	4.35	4.76	2.92	1.46	-0.69
Utilities	0.25	0.20	0.06	-0.32	-0.45
Machinery and Equipment	0.84	0.82	0.60	0.26	-0.15
Residential Structures	0.06	0.07	-0.14	-0.46	-0.31
Labour Force	0.02	0.01	-0.04	-0.11	-0.13
Households	0.01	0.01	-0.01	-0.09	-0.15
Unemployment	-0.68	-0.54	-0.21	0.23	-0.14
Personal Income per Household ($K)	0.03	-0.02	-0.09	-0.16	-0.18
Labour Income per employed worker ($K)	-0.01	-0.04	-0.08	-0.13	-0.17

(a) Level Impact

For Ontario, the scenarios suggest an initial increase in total output of between 0.1 per cent and 0.35 per cent in the first year in Scenarios A, B, and C. The positive effect in Scenario E is smaller, reflecting the slower staging-in of investment expenditures made by industries directly affected by the regulations. These net positive effects are soon eroded by the additional costs to the provincial economy. In Scenarios A, B and C, reduction in total output ranges between 0.25 and 0.34 per cent by the completion of the phase-in period and longer term negative effects in the 0.4 to 0.6 per cent range. Scenario E yields longer term negative effects of close to 0.5 per cent, but these emerge more slowly than in the other three Scenarios.

Within the province, output of the construction and manufacturing durables would be most positively affected initially, reflecting the positive effects of increased investment in regulation induced structures and equipment. The positive effects on construction would tend to last through the phasing-in of these expenditures. Manufacturing, however, would bear the lion's share of the negative effects (one-half to two-thirds over the longer term) that would emerge within a couple of years. This reflects the fact that this sector is most directly affected by the control program, it is the sector that is most sensitive to loss of international competitiveness, and is the sector most sensitive to loss of real consumer incomes.

Within the province's manufacturing sector, these results indicate major negative effects for the refineries (as much as a 13 per cent decline in output of the 2-digit "petroleum and coal products" industry). In Scenarios A, B and C, most of these effects on the industry emerge quickly, indicating a major problem of "adjustment". As is detailed in Appendix F, output reductions are also notable for producers of primary metals, non-metallic minerals. and chemicals. In Scenario C, these reach approximately 3 per cent.

Negative effects would be proportionately less severe in other sectors, but would likely be widespread. The singular major exception would be in government administration where additional municipal and provincial government employment has been assumed to be required to maintain waste disposal sites and to administer the regulations. There would be some negative effects in these sectors reflecting the reduced population of the province, but these would be insufficient to offset fully the positive, regulation-related direct effects on output and employment.

Employment effects can be expected to follow the pattern of output impacts, though by less severe amounts. The results indicate initial, positive effects, followed by negative impacts. Again, we would expect the negative effects would be widespread, with net positive effects on health (additional operating expenses in the hospital sector) and in public administration.

Overall labour productivity in the province would be reduced, and with reductions in employment, we anticipate this would yield reductions in real personal incomes per Ontario household. The results suggest a reduction of as much as 0.3 per cent by the end of the phasing-in period in Scenario B. These negative effects are smaller in the other cases. In general, these "per capita" negative effects diminish slightly over the longer term as households leave the province. Another consequence of the out migration would be to dampen the negative effects on the provincial unemployment rate longer term. Initially, of course, we expect this would be reduced as the investment in control structures and fabrication of related equipment increases employment by more than effects on the labour force.

All of the above records the implications from the point of view of the year-over-year impacts on Ontario sectors and the economy taken as a whole. While there are negative impacts, in most sectors, these are one per cent or less, and these magnitudes take up to five years to be reached, suggesting only a small reduction in annual growth. Thus, these do not suggest that the impacts would be so severe as to reduce output as compared to today. All they do is suggest a slowing in growth that would otherwise occur.

But the magnitudes for primary metals, non-metallic minerals, chemicals, and the refining sector are significantly larger. For these industries, it may be useful to view the implications from the point of view of their impact on growth; i.e., would they be so severe as to suggest that the industry size would be reduced as compared to today? If not, as in most sectors, then unfavourable adjustment in labour markets would be more likely met through attrition (i.e., failing to replace retired workers) than through lay offs. But if the industry is down sized, then there are likely to be lay offs with which the owners and government will be confronted. It should be noted, of course, that even where attrition is the general rule, there may be some firms that will have to down size.

We judge that the magnitude of the impacts in the primary metals, non-metallic minerals and chemicals sectors is simply too small to fully offset underlying growth that would occur in any event. A three per cent reduction by 1993 implies growth reduction of about 0.5 per cent annually; these industries are likely to be growing by 2-5 per cent annually in any event.

The refinery impact is more severe, with approximately a 10 per cent reduction by 1993 implying annual growth deceleration of 2.5 per cent. This is likely to imply some downsizing in the industry, although there is dispute about what would happen in any event. The industry generally, the National Energy Board and others have been very cautious about growth prospects for the sector in recent years. This would argue for a "down sizing" type problem. We are less certain about that underlying scenario, given recent reductions in the real price of international oil, and strong growth in North America's industrial heartland. These events tend to suggest some underlying growth and would weaken the "down sizing" argument. On balance, however, it is the one sector where we think this scenario is certainly a clear possibility.

One final note on this perspective. Our view that down sizing is unlikely because of reasonable underlying growth should be seen as a 5-10 year view. In the nearer term, the consensus of forecasters is that North American growth will significantly decelerate, with the strong potential for a recession, some time over 1989-90. Thus, in the very near term, there is a strong possibility that industrial output will be declining across a wide range of Ontario sectors in any event. For those who supply the control equipment, the imposition of revised 308 regulations will enhance their market prospects when they otherwise would be weakened. For those who are affected as polluters, it will both strengthen and worsen their prospects during a period when activity is weak. Strengthening will follow from the need to supply additional investment goods and services. The worsening will occur because of the additional costs to the affected firms and industries. Note that while this latter effect emerges only slowly over time, working capital of the regulation-affected firms is likely to be weak at the close of the decade, implying a reduced ability to finance the investment from internal sources.

5 IMPLICATIONS FOR THE ONTARIO ENVIRONMENTAL PROTECTION INDUSTRY

The Ministry of Environment has provided this study a draft copy of a "Study of the Ontario Environmental Protection Industry" prepared by Woods Gordon Management Consultants, dated May 1988. This study indicates on page 25, that the existing industry experienced sales of $1.5 billion to $2.5 billion in 1987. Of this, $800 million to $1.4 billion was in provision of recycling services and for waste disposal and destruction services, leaving a sales range of $700 million to $1.1 billion for other goods and services. Further, of course, a significant part of these sales were oriented towards management of water and solid wastes, implying a still smaller amount for that which is oriented towards air protection.

Comparison of these figures with the additional demands generated by each of the scenarios provides indications of the opportunities and problems for the industry that may result from revisions to regulation 308. Table 16, below, provides indications of the change in market size, and the amount that could reasonably be expected to be supplied by Ontario firms for each of the scenarios.

Table 16

Impact on Market Size and Production, All Scenarios
(in millions of 1987 dollars)

	1989	1990	1991	1992	1993	1994
Scenario A						
Market Size						
Structures	166	171	170	167	168	16
Machinery and Equipment	454	445	434	450	460	52
Estimate of Ontario Supplied						
Structures	157	163	162	158	159	16
Machinery and Equipment	318	312	304	315	322	42
Scenario B						
Market Size						
Structures	229	239	239	227	244	28
Machinery and Equipment	814	790	776	792	783	103
Estimate of Ontario Supplied						
Structures	217	227	227	216	232	27
Machinery and Equipment	570	553	543	555	548	83
Scenario C						
Market Size						
Structures	112	117	115	113	114	12
Machinery and Equipment	325	318	308	321	329	38
Estimate of Ontario Supplied						
Structures	106	111	110	107	108	11
Machinery and Equipment	228	223	216	225	230	30
Scenario E						
Market Size						
Structures	63	65	62	63	65	66
Machinery and Equipment	176	170	158	172	183	180
Estimate of Ontario Supplied						
Structures	60	61	59	60	61	63
Machinery and Equipment	141	136	126	138	147	144

Table 16 (cont.)

Impact on Market Size and Production, All Scenarios
(in millions of 1987 dollars)

	1995	1996	1997	1998	1999	2000
Scenario A						
Market Size						
Structures	12	13	13	12	16	18
Machinery and Equipment	42	42	42	41	50	55
Estimate of Ontario Supplied						
Structures	11	12	12	12	15	17
Machinery and Equipment	34	34	33	33	40	44
Scenario B						
Market Size						
Structures	22	21	20	19	22	24
Machinery and Equipment	98	98	103	95	95	110
Estimate of Ontario Supplied						
Structures	21	20	19	18	21	23
Machinery and Equipment	78	79	82	76	76	88
Scenario C						
Market Size						
Structures	8	9	9	9	12	13
Machinery and Equipment	30	31	30	30	37	40
Estimate of Ontario Supplied						
Structures	8	8	9	8	11	12
Machinery and Equipment	24	25	24	24	30	32
Scenario E						
Market Size						
Structures	61	61	62	62	66	68
Machinery and Equipment	169	170	171	171	181	186
Estimate of Ontario Supplied						
Structures	58	58	59	59	63	64
Machinery and Equipment	135	136	137	136	145	149

Table 16 (cont.)

Impact on Market Size and Production, All Scenarios
(in millions of 1987 dollars)

	2001	2002	2003	2004	2005
			Levels		
Scenario A					
Market Size					
Structures	21	13	17	23	27
Machinery and Equipment	59	40	53	66	80
Estimate of Ontario Supplied					
Structures	20	12	16	22	26
Machinery and Equipment	47	32	43	53	64
Scenario B					
Market Size					
Structures	27	19	21	27	30
Machinery and Equipment	115	91	98	110	125
Estimate of Ontario Supplied					
Structures	26	18	20	25	29
Machinery and Equipment	92	72	78	88	100
Scenario C					
Market Size					
Structures	15	9	12	17	19
Machinery and Equipment	43	29	39	49	58
Estimate of Ontario Supplied					
Structures	14	8	12	16	18
Machinery and Equipment	34	23	31	39	47
Scenario E					
Market Size					
Structures	70	61	66	72	41
Machinery and Equipment	190	171	186	201	127
Estimate of Ontario Supplied					
Structures	66	58	63	69	39
Machinery and Equipment	152	137	149	160	101

For Scenarios A, B and C, increased demands for machinery and equipment in 1989-93 would at least double the demands on the Ontario industry that are estimated to have existed in 1987. Demands for construction of structures would add another 25-50 per cent to the sales of the relevant construction and design industries, given the low end of the Woods Gordon estimates ($450 million) and 15-30 per cent at the high end.

Even if one assumes that some part of the additional demands would be met through imports, the impact on the supplying industry would still be enormous, particularly for suppliers of equipment. In Table 16, we have assumed that 70 per cent of the additional demands for machinery and equipment would be met from domestic suppliers in 1989-93, and 80 per cent thereafter in Scenarios A, B and C. Almost all, 95 per cent, of the inputs to construction of structures is assumed to be met by domestic suppliers.

This reduction in the view of the pressure on Ontario suppliers still leaves us with a view of intense supply problems. In the case with the smallest additions to demand, Scenario C, estimates of $300 million (at 1987 prices) still are equivalent to a doubling of the entire sales of machinery, equipment, instruments, and supplies estimated by Woods Gordon for 1987. Allowance should of course be made for normal growth in suppliers' capacity, but we nevertheless conclude that such additional demands would be difficult for Ontario suppliers to meet.

Demands on the construction industry are less likely to pose a significant problem, especially if growth of normal business investment decelerates, or the level of demands fall, as the North American economy slows at the end of the decade. Note, however, that the consensus of Free Trade analysis suggests that demands on the construction industry will continue to be high as a consequence of the Agreement. And of course, the widely anticipated recession for the economy may not emerge.

Although the effects would be small in initial years, it should also be recalled that Ontario suppliers of pollution control equipment will face increasing material and labour input costs as a consequence of revisions to Regulation 308. Reference to changes in total industry prices and wage rates reported earlier in the section on national results will indicate the magnitudes involved. In this respect, suppliers of pollution equipment will be indistinguishable from all other industries in the province and Canada, as the regulated industries begin to pass their additional costs on in the form of higher prices.

Net of these considerations, we conclude that the additional demands on the machinery, equipment and instrumentation suppliers of the province will be very large, and possibly beyond their capacity to adjust to the increased demands. This suggests that the Ministry should focus on supply policies that facilitate this quick adjustment, rather than on policies that force purchasers of the equipment to source locally. The magnitudes involved suggest that supply constraints, and consequent inflationary pressures, will be significant in any event. (In developing our macroeconomic impacts, we have assumed these constraints are not binding. In degree as they may be, the positive effects reported in this study for Ontario, and Canada, are overstated.)

It should be noted that the large additions to demand will fall off sharply after 1994 if Scenarios A, B and C are followed. This may constitute a "moral hazard" difficulty for the Ministry if policy focuses on developing supply. Knowledge of forthcoming changes to regulations in other provincial (and U.S. state) jurisdictions may indicate a high probability that demand will be secured elsewhere by the mid-1990s, but the authors of this study are not competent to judge this. Scenario E, of course, provides a more orderly, incremental impact on the supplying industry.

Finally, it should be recalled that operation of abatement and monitoring equipment (see the earlier section on Assumption Details for the magnitudes involved) constitutes a significant addition to demands on labour markets and material input suppliers. Direct additions to employment, in particular, are large. For many firms, the additional requirements will not be sufficient to justify additions of full-time staff. Further, proper training and quality control of their results would likely be difficult to achieve in this circumstance. This suggests that the Ministry may wish to focus on fostering the development of a competitive, "operations and monitoring" service "industry" that supplies such services on a procurement basis.

6 CONCLUSIONS, QUALIFICATIONS TO RESULTS, AND POLICY IMPLICATIONS

Viewed from the point of view of provincial totals, these results suggest that the impact of revisions to Regulation 308 on output, employment, and real incomes of the population of Ontario will be modest. There are initial, positive effects followed soon after initiation of the revisions, by increasing negative effects. In the medium to longer term, these negative effects are less than one per cent.

Is this a significant figure? No authoritative judgment can be made, and of course they need to be weighed against the benefits to the natural environment, but the following "perspectives" may be useful. A figure of one per cent is not a large number by itself, and an impact of one per cent would occur off a Base Case in which underlying growth of output, employment and incomes would be occurring in any event. Thus, one may reasonably expect that per capita, real personal incomes in Ontario will be 3-4 per cent larger than they are today by 1993, and 14-15 per cent larger by 2005. In Scenario B, the case with largest negative effects, real, per household incomes are reduced by about 0.3 per cent by 1993, implying a very modest dampening in the underlying growth. A slightly smaller population for the province will also likely result, but again this will only slow underlying growth.

Negative effects, however, are not spread uniformly over producing firms and the population, although most of the population will in the long run, face a slight reduction in market-measured real incomes. Rather, these effects will be concentrated on particular firms, their employees and shareholders, and perhaps specific municipalities and regions of the province. As our results suggest, for those who are dependent on refineries, and some of the "smoke stack" industries of the province, effects in the form of very large investment and operating expenses and in reduced output, income and employment will be very notable. And in the long, if not near term, the Government of Ontario will have to increase direct taxes to pay for enlarged public sector expenditures.

While the "polluter pays" principle is efficient and has an elegant simplicity, it may be useful for the Ministry to consider alternative instruments to enforce compliance in selected cases if the Government of Ontario is unwilling to bear the negative economic consequences that these results suggest. An environmental tax on the products of the industries, regardless of the locational source of the product, would appear to meet GATT (and Free Trade Agreement) "national treatment" standards.

These results also suggest that the Ministry should consider details of enforcement instruments. Phasing-in the provisions has an appeal in the sense that it provides time for affected producers and consumers to adjust to the regulations. It does, however, pose a problem in that in the absence of specific measures, there is no incentive for the producer to comply until the latest moment permitted by the regulation. Also, if the effect of phasing-in is to ensure immediate compliance of new producers, or for expanded capacity of existing producers, while others are able to delay compliance, an "economic rent" is provided to the producers who delay compliance.

Finally, it may be noted that the impact measures reported in this study are subject to several qualifications. This is a "first" major study of the proposed revisions, and estimates of the direct impacts in the form of increased investment and operating expenditures may be subject to significant revision in light of long-term changes in underlying industrial process. Changes in that process, would alter input-output relations, and accordingly our indirect effects.

Final demand (consumer, investor, and foreign trade) price and income elasticities have been used in this assessment of the proposed revisions to the regulation. The specific parameters, while rigorously developed with econometric procedures and embodied in the models used, are always subject to review. Thus, while we judge that the overall character of the results, and comparison of results as between Scenarios, appears reasonable, key elasticities affecting individual sectors may in fact differ significantly from those embodied in the models. This suggests the Ministry may wish to concentrate on a rigorous estimation of these for selected industry sectors that appear from these results to be "significantly" affected.

The procedure adopted has assumed that future industry investment would not otherwise meet revised regulation standards; consequently, we have assumed that such new plant and equipment would also face compliance costs. But as these results indicate, the growth of this capital stock may in turn be dampened by the regulations. This feed-back loop has not been considered (it would require a major revision to the structure of the models used). Accordingly, the "exogenous" compliance costs may be overstated in these results, although we judge that this is a second-order problem, and would not change the character of overall or sectoral results.

Finally, this study does not assess the implications of market-measured benefits of the revised regulations. These would include marketable by-products of compliance, possible benefits in the form of increased productivity in primary (agriculture and forestry) sectors, potential for expanded "tourism" from a cleaner environment, reduced health-care requirements (a direct reduction in National Product), and potentially increased investment by "sun rise" industries that locate partly on the basis of the nature of the natural environment.

APPENDIX A

OVERVIEW OF THE INFORMETRICA MODEL

APPENDIX A

THE INFORMETRICA MODEL (TIM)

TIM DESCRIPTION

The Informetrica Model (TIM) is a large, disaggregated econometric model of the Canadian economy. The basic structure of the model follows in the tradition of several predecessor models including those of the CANDIDE family and earlier ones such as the Klein-Goldberger and Brookings models. The basic structure of TIM is shown in the TIM Flow Chart.

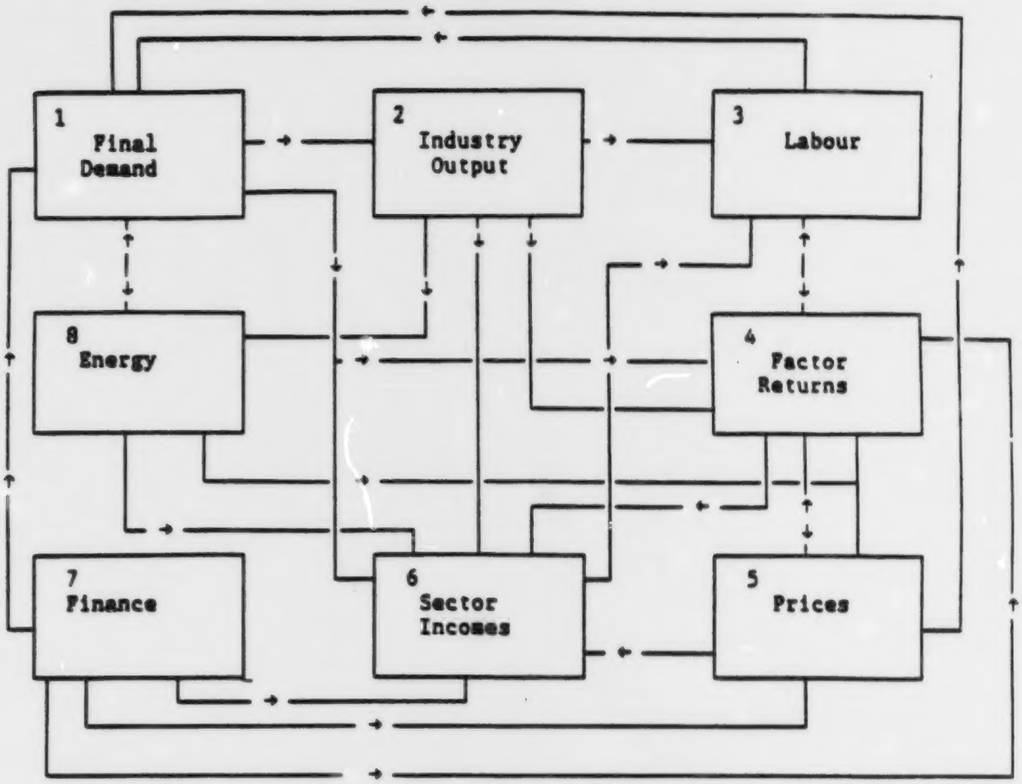
A highly simultaneous model, TIM provides forecasts for almost 5,000 separate measures of economic activity, prices and incomes. One key attribute of TIM is its highly disaggregated final demand section. Individual estimates are available for:

- 51 categories of consumer expenditure,
- government expenditures by functional type and level,
- 48 export categories with separate equations for the U.S. and rest-of-world
- 41 import categories with the same directional detail,
- separate estimates for each of plant and equipment investment and capital stocks for over 40 industrial categories,
- and projections for residential construction.

The final demand sector is an important channel for the resolution of impacts and for the differentiation of alternatives. Most final demand categories are explained as functions of relative prices and incomes. Thus, any factor that affects either prices or incomes will directly change the level and/or composition of final demand. One characteristic of TIM is an endogenous government expenditure section with "reaction functions" providing a linkage from the scale and composition of the economy or government revenues and/or activities, back to government expenditure on goods and services. In some policy impacts, these reaction functions are specifically exogenized to exclude an additional government response.

Using an integral input-output sub-model, TIM converts this substantial final demand detail into the equivalent industrial output - Gross Domestic Product at factor cost - for approximately 80 industries. Thus, the level and composition of industrial activity is a direct function

THE INFORMETRICA MODEL - SECTORAL STRUCTURE



1-Consumption=f(real personal income, relative prices, demographics)
Investment=f(capital stock, output, industry income, capital prices)
Government=f(activity)
Imports=f(activity, relative prices, tariff rate changes)
Exports=f(foreign activity, relative prices)

2-Output=f(Consumption+Investment+Government+Exports-Imports)

3-Labour Supply=f(income, demographics, labour market tightness)
Employment=f(output, capital stock)

4-Labour Income=f(labour market tightness, output, capital stock, prices)
Capital Income=f(interest rates, capital costs and stock, foreign prices, subsidies)
Oth. Bus. Income=f(output, prices)

5-Prices=f(foreign prices, domestic factor incomes, taxes and subsidies)

6-Personal Income=f(labour income, transfers, property income)
Corporate Income=f(domestic and foreign capital income)
Government Income=f(net interest, tax revenue)
Foreign Income=f(personal remittances, earnings on investments)

7-Interest Rates=f(foreign interest rates, asset demand)

8-Oil Production=f(exogenous assumptions)
Demand=f(industry and household and foreign demand)
Gas Production=f(net requirements)
Demand=f(industry and household and foreign demand)
Energy prices=f(oil price, tax and subsidy assumptions)

Informetrica
Limited

APPENDIX B

OVERVIEW OF THE REGIONAL-INDUSTRIAL MODEL

RIM DESCRIPTION

The Regional-Industrial Model (RIM), a formal "top-down" model, is used to provide the provincial dimension to the estimates of industrial activity, employment and income. Because of the availability of the sophisticated macroeconomic structure inherent in The Informetrica Model, TIM, the structure of RIM is focused directly on the regionalization of the detailed outputs from TIM. The major model flows are outlined in the RIM flow chart below.

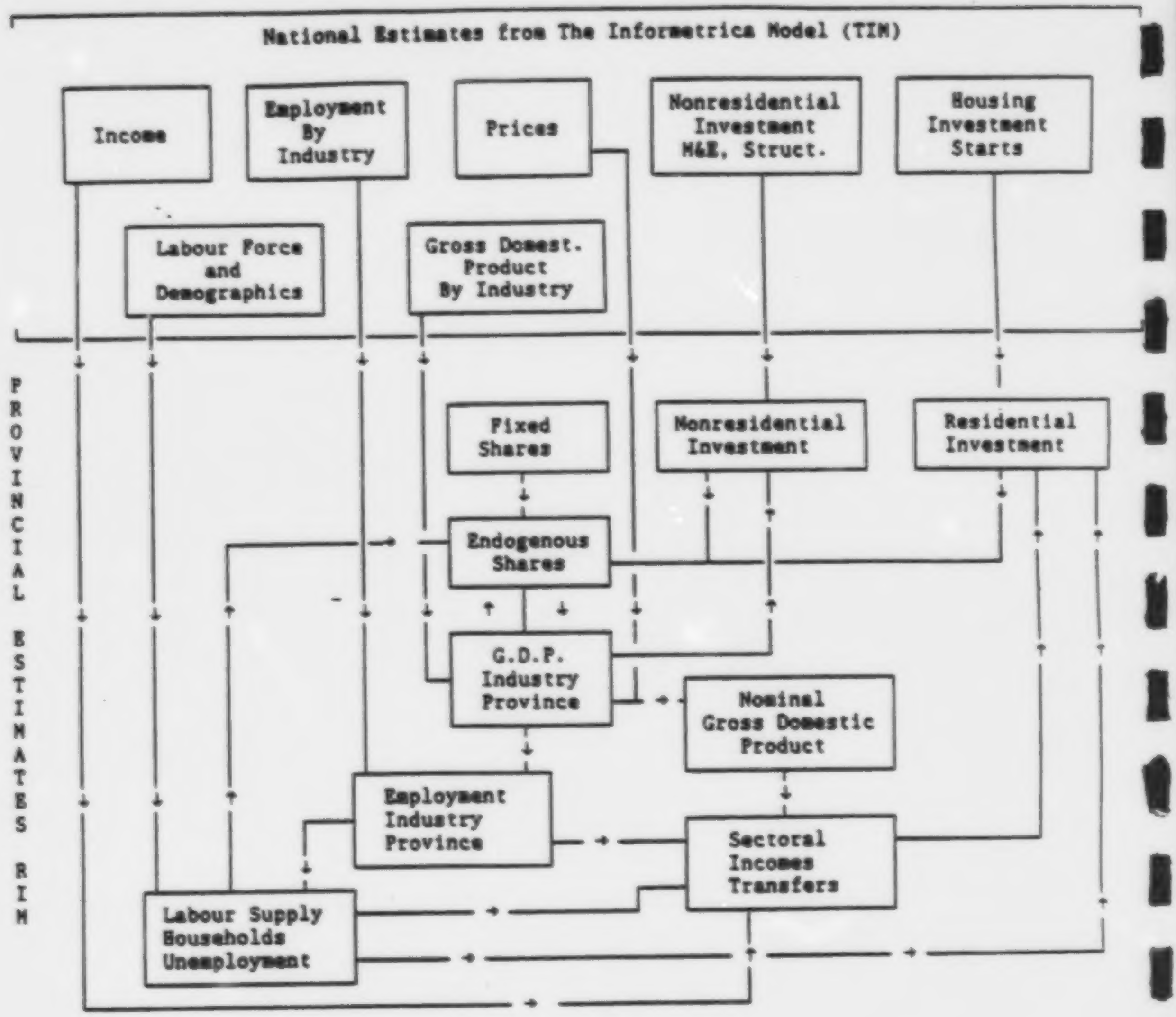
The initial stage is the regionalization of the TIM forecasts for industrial output - Gross Domestic Product at constant prices - for 61 industries. In general, for these impacts, the regional shares of activity for most traded goods-producing industries are unchanged from their base case values. The major exceptions to this rule are primary sector industries, such as metal mining, whose shares have been altered because of detailed final demand responses in TIM. For example, the focus in B.C. is on copper, whereas the dominant metal in Ontario is nickel. In these impacts, the relative export responses of the various metal categories in TIM is used to vary the regional shares of metal mining. For example, the variation in fertilizer exports, (e.g., potash), is the major determinant for Saskatchevan's share of non-metallic mineral output but does not directly affect the level of non-metallic mineral output in Ontario.

The assumption of stability of regional shares for other goods-producing industries, particularly manufacturing, is tenable because of the level of industrial disaggregation in RIM. For example, the differential impact of a change in interest rates on the demand for ships relative to the demand for automobiles is easily regionalized because both components of transportation equipment manufacturing are considered separately within the TIM/RIM framework.

The principal determinant of regional construction activity is, of course, residential and nonresidential investment. The national investment forecasts at the detailed industrial level are distributed to the regions using the regional estimates of constant dollar GDP as the principal explanatory variables. Estimates are provided for 14 industrial sectors for investment, discards and capital stock for both nonresidential structures and for machinery and equipment. The regional forecasts of housing starts are primarily a function of regional income, the vacancy rate and the housing stock. Estimates are provided for starts, completions and stocks for both singles and multiples for the 10 provinces.

The regional allocation of activity in the non-traded goods and services industries is determined by the regional level of households, aggregate income, GDP or some similar measure relative to the corresponding national level. For some industries, such as wholesale trade, some cross-region relationships are modelled.

STRUCTURE OF THE REGIONAL-INDUSTRIAL MODEL (RIM)


National Estimates from The Informetrica Model (TIM)
Income
Employment By Industry
Prices
Nonresidential Investment M&E, Struct.
Housing Investment Starts
Labour Force and Demographics
Gross Domest. Product By Industry
PROVINCIAL ESTIMATES RIM
Fixed Shares
Nonresidential Investment
Residential Investment
Endogenous Shares
G.D.P. Industry Province
Nominal Gross Domestic Product
Employment Industry Province
Sectoral Incomes Transfers
Labour Supply Households Unemployment

APPENDIX C

OVERVIEW OF THE BASE CASE

EXECUTIVE SUMMARY

Overview

The Canadian economy continued to record strong growth through the end of 1987. We believe that the end-of-year pace will slow to a 2 per cent annualized range during 1988. Given the pattern of growth last year, however, this will be sufficient to yield a year-over-year increase in total real output of more than 3 per cent, but insufficient to make large dents in the unemployment rate. The pace of inflation, which has been running below 3 per cent at annualized rates since the fall, is likely to ease off from the pace recorded in 1987.

As well, 1988 should mark a change in the major engines of economic growth. In particular, the willingness of households to reduce their savings rates, which reached extraordinarily high levels in 1982, has probably run its course. The growth stimulus of the U.S. economy is likely to play a smaller role in Canada's expansion this year. However, a rebounding U.S. industrial heartland, following from the effects of a depreciated U.S. currency, should mitigate the effects of slowed overall U.S. growth, as Canadian manufacturers are closely tied to that activity. These features will be reflected in slowing consumer expenditures growth, reduced housing starts, and slowed expansion of merchandise exports.

Given these events, the investor holds the key to continued growth this year. Surveys of investor intentions and the pattern of spending at the end of 1987, indicate reason to be confident of a strong investment surge. In our outlook, business spending for fixed capital accounts for almost one-half of the growth in real GDP this year. This strength should be equally distributed between spending for structures and for machinery and equipment. Total expenditures on structures, however, will depend critically on rebounding energy investment.

The impact of investment activity on GDP growth depends on how much of the input requirements can be supplied from domestic sources. Most of manufacturing is operating at well below capacity, and should be able to meet the additional demands without undue strain. Nevertheless, an anticipated 6 per cent increase in merchandise imports is expected to accompany the mini investment boom.

As well, the opening of several new Canadian auto plants will provide a special source of strength this year and next.

Beyond 1988, the key determinant of economic conditions is likely to be the pace of inflation, and the reaction of monetary authorities to it. Although we anticipate little progress on the unemployment front, we judge that growth of unit labour costs will accelerate as we enter 1989. More importantly, steady U.S. and other OECD growth is likely to generate strengthening prices for commodities, including oil, metals, and in 1989, grains. On the oil-price front we have assumed a real ($87) decline of 7 per cent in the OPEC marker price in 1988 and a similar rise in 1989. This is assumed to be followed by 3 per cent real growth per annum through 1995

Selected National Indicators
Post II-87 Reference Forecast

		1988	1989	1990	88-92	93-97	98-05
		Average Annual Rates of Growth					
Gross National Expendit.	$K	3.1	2.4	1.0	2.4	2.5	2.4
Personal Consumption	$K	2.5	2.1	1.1	1.8	1.9	1.6
Government Current Exp.	$K	2.5	0.7	1.9	1.5	1.5	1.4
Total Investment	$K	5.7	3.2	0.7	3.2	3.6	3.8
Government	$K	0.5	1.5	2.9	2.2	3.3	2.3
Business	$K	6.5	3.4	0.4	3.4	3.6	4.0
Residential	$K	-3.9	-1.3	-0.3	-0.3	0.1	1.7
Nonres. Struct.	$K	11.0	6.6	0.1	4.8	4.6	4.2
Machinery and Equip.	$K	10.5	4.3	0.9	4.7	4.7	4.7
Inventory Change	$K(a)	1021.2	759.7	-448.0	940.7	1289.8	1292.2
Exports	$K	4.8	3.6	1.2	3.5	3.4	2.9
Imports	$K	5.9	2.0	-0.7	2.7	2.3	2.2
Wages and Salaries	$C	7.2	5.9	5.1	6.1	6.0	7.2
Personal Income	$C	6.6	6.6	5.2	6.0	5.9	6.7
Real Per Capita Income	$K	1.2	1.5	-0.8	0.8	1.1	0.9
Unemployment Rate	%(a)	8.1	8.2	8.9	8.5	8.7	7.6
Consumer Price Index(71=100)		3.5	4.3	3.4	3.6	3.4	4.6
Prime Comm. Paper Rate	%(a)	8.9	9.9	8.6	8.6	8.1	8.4
U.S./Canada Exch. Rate	$(a)	0.790	0.780	0.780	0.782	0.783	0.812
U.S. Gross Nat. Expend.(72$)		2.3	2.4	1.7	2.5	2.9	2.6
Price Deflator (72=1)		3.7	4.0	4.0	3.7	4.1	4.8
U.S. Commercial Paper Rate	%(a)	7.4	8.7	7.6	7.5	7.3	7.6
Persian Gulf Oil Price	$US	-3.6	12.1	7.2	5.6	6.8	6.9
in $US-1987		-7.1	7.8	3.0	1.8	2.6	2.0
Alberta Border Gas Price	$C	-11.3	16.7	7.6	5.0	6.7	5.8
Oil & Gas Gross Cash Flow	$C	-7.2	14.0	6.9	4.4	8.0	6.2
Nonres. Invest	$C	24.6	17.7	7.3	11.7	8.1	5.8
Natural Gas Exports	bcf	5.3	7.5	12.0	8.9	2.5	0.0

(a) Average

Gross Domestic Product
(millions of $71)

Post II-87 Reference Forecast	1988	1989	1990	88-92	93-05
	Average Annual Rates of Growth				
Canada	3.3	2.5	1.0	2.5	2.3
Newfoundland	3.2	2.0	1.9	2.3	2.3
Prince Edward Island	2.2	1.8	1.4	1.7	1.6
Nova Scotia	2.4	1.6	1.2	1.6	1.5
New Brunswick	2.5	2.3	1.7	2.3	1.8
Quebec	3.1	2.9	1.7	2.6	2.1
Ontario	3.7	2.7	0.4	2.8	2.6
Manitoba	2.0	2.0	2.1	1.6	1.6
Saskatchewan	3.3	2.5	1.9	2.3	2.0
Alberta	4.0	2.1	1.0	2.1	2.3
British Columbia	2.7	1.8	0.9	2.0	2.2
Territories	2.1	2.6	3.0	2.2	3.1

For the longer term, this outlook should be construed as a scenario constructed around the view that monetary policy will be dominated by an inflation-fighting priority. The scenario assumes that this policy succeeds in that inflation remains below 4 per cent through most of the next decade. It is a recipe, however, that contains the seeds of income transfers to the holders of wealth through high real interest rates, and slow growth of output, incomes, and employment.

The outlook envisages steady economic growth, founded on steady but slowing growth of consumer expenditures, moderate nonresidential investment growth and a significantly improved net export balance. Price pressures are expected to remain in check throughout. Nominal interest rates remain stable during the next two decades, but real rates remain stubbornly high by historical standards.

Although these assumptions generate moderate output and employment growth throughout the near and medium term, scant progress is achieved in reducing the unemployment rate. Longer term, labour force growth is expected to moderate, reflecting decelerating growth of the population and only small increases in participation rates. Consequently, the unemployment rate falls below 7 per cent in the late years of the forecast horizon.

parts. Fishing is not expected to see the same growth it has enjoyed over the past two years, although maintenance of high prices should keep the industry in a healthy position. On the tertiary side, trade and finance are expected to be major contributors. While household formation slows, as does the labour force, relatively less growth in employment, results in little change in unemployment rates.

New Brunswick - The New Brunswick economy is expected to perform close to the national average over the near term. Most of this strength is expected to come from forestry and related industries, and food processing. Shipbuilding, via the frigate program, is expected to remain strong through to the mid-nineties with the awarding of a contract for a further six frigates. Recent growth in New Brunswick has also been supported by an expansion of the non-metals mining sector, and some additional expansion is envisaged as the new mines move towards full productive capacity. The highly export-dependent nature of the New Brunswick economy makes it particularly vulnerable to exchange rate fluctuations. This outlook, however, assumes a fairly stable exchange rate which should allow the province to maintain and expand its export base in line with market opportunities. Ongoing and planned electric power investments, as well as additional government-related projects, are expected to boost construction and related activities through the medium term. Longer-term nonresidential construction prospects are not as robust, with the completion of the various major projects. Employment growth is expected to keep pace with labour force growth through to 1993, yielding roughly a constant unemployment rate. Post-1993 a slower growing economy and less employment growth result in some increase in the unemployment rate.

Quebec - Quebec had the strongest growth rate of all the provinces last year at 4.8 per cent. As Quebec's industrial base is heavily weighted toward consumer nondurables, weaker consumer spending is expected to dampen growth somewhat over the near term. Nevertheless, the province's rate of growth over the next five years will parallel that of Ontario, and remain above the national average. Much of this strength comes through the development of additional hydro capacity with positive implications for the construction industry. While consumer nondurable manufacturing will continue to be important, a greater orientation toward durable manufacturing, in particular aircraft and parts and additional capacity in automobile production, combined with growth in primary metal manufacturing is expected to bolster provincial growth. However, below-average growth is expected in several traditional industries, including refining and chemicals. Employment growth is expected to be cantered in services and construction, with the unemployment rate fluctuating around 10 per cent.

Ontario - For 1988-89, Ontario's growth will slacken from the feverish pace set last year. The province's export-oriented manufacturing industries are strongly tied to an export-led growth surge in U.S. industry. Motor vehicles and parts, in particular, are vigorously bouncing back after a slump in demand last year. A healthy transportation equipment sector has positive spinoffs for other manufacturing firms in the province such as those engaged in primary metals, metal fabricating, rubber and chemicals. This year, housing starts will likely drop 20,000 from last to go ahead in this forecast, the province is expected to share in the anticipated upturn in the oil and gas industry as world prices begin to rise. Beginning in the 1990s, Saskatchewan is expected to enjoy improvements in labour market conditions, with unemployment rates below six per cent by the final years of the forecast.

Alberta - Optimism has returned to the oil patch. Although oil prices are expected to decline this year, the price rebound in 1987 has had the effect of a tonic on investor confidence. Consequently, the province's rate of expansion in 1988 is expected to outpace all other provinces and reach 4 per cent. This masks the fact however that Alberta is still wrestling with the effects of low farm incomes and continued fiscal restraint. Some recovery in agricultural output is anticipated this year, but weak coarse grain output will limit the improvement. Nevertheless, as oil and grain prices begin to recover, investment and output are expected to rebound. Over the longer term, diversification of the provincial economy into the production of higher value-added products, especially in the food processing, chemicals and wood products industries, will help to sustain provincial growth. This transformation will be especially important as conventional oil reserves diminish and the energy sector plays a smaller role in stimulating growth. Total employment growth is expected to post gains sufficient to lower the provincial unemployment rate below 6 per cent by the turn of the century.

British Columbia - British Columbia sailed through 1987 on the strength of its primary sector. World demand for the province's ores expanded, and housing starts remained strong in the U.S., supporting rapid growth in the forestry and wood manufacturing sectors. 1988 should see a deceleration of growth to the 2.5-3.0 per cent range as a slumping U.S. housing market takes the steam out of the forestry industry. Continued weakness through 1990 is envisaged. Countering this dark cloud in the forest products sector is a healthy pulp and paper industry. An expanded and modernized capital stock has enabled producers to take advantage of the recent firming of prices. Although growth over the next five years will average 2 per cent per annum, productivity gains are also expected to be strong in the province's key goods-producing sectors. As a result, employment growth will be weak and the unemployment rate will rise above the 12 per cent mark in the early 1990s. The mining sector has been showing mixed results with some metals experiencing rapid expansion while others are plagued with over-capacity. Precious metals have been the star performers of late, but the recent firming of most base metal prices is expected to continue such that modest growth for the entire metal mining industry is recorded over the forecast period. Longer term growth in the forest product industries will be less robust as some supply constraints are envisaged. Overall this will yield growth slightly above 2 per cent per year. Employment gains, running annually in the 1 per cent range, will result in a slow decline in the jobless rate, which falls below 11 per cent by the end of the forecast period.

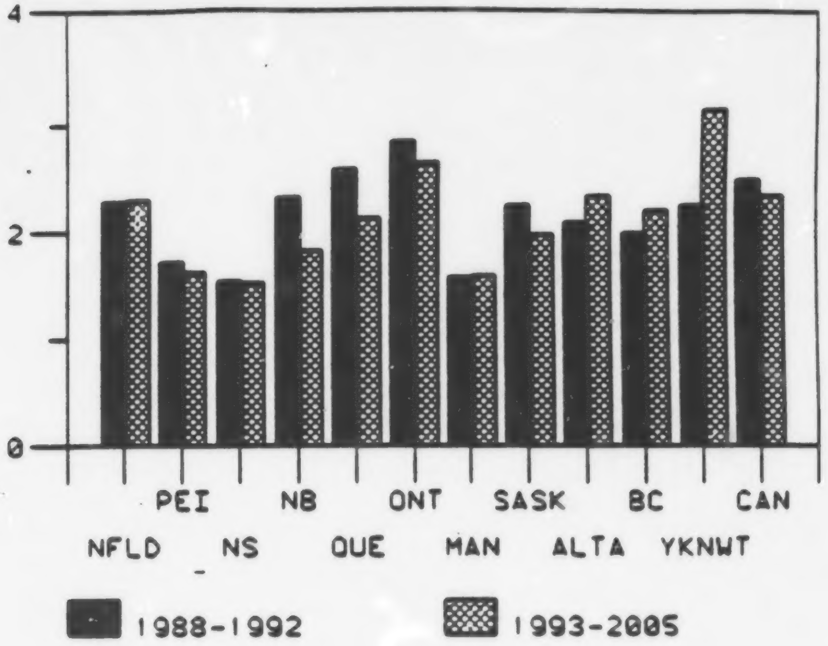
Territories - With continued investment and production expansions anticipated within the Territories' resource extraction sector, economic activity will be healthy over the near term. Investment activity through

Nonresidential Structures Investment
(millions of $71)

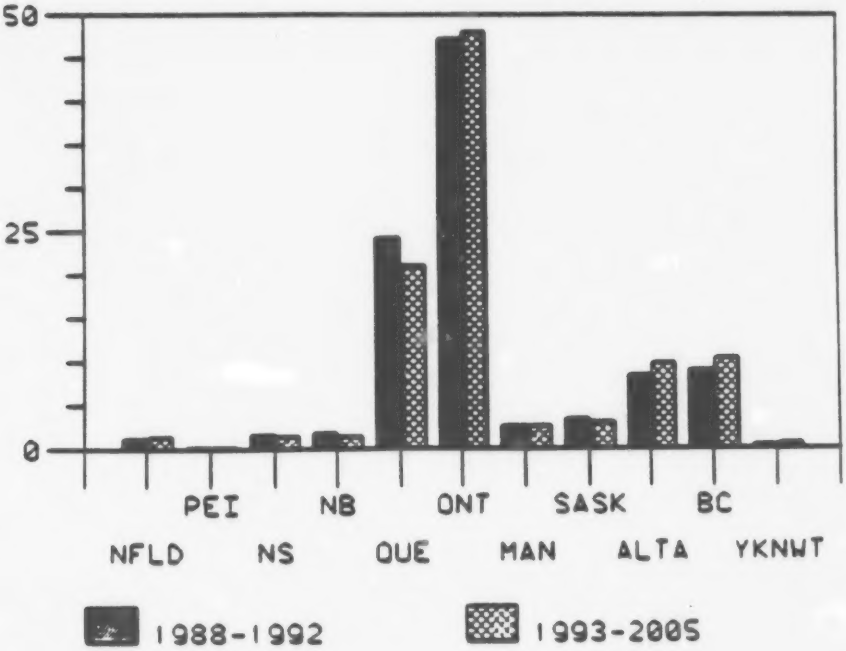
Post II-87 Reference Forecast	1988	1989	1990	88-92	93-05
	Average Annual Rates of Growth				
Canada	7.3	5.0	0.8	3.9	3.9
Newfoundland	9.1	18.7	9.1	10.0	2.3
Prince Edward Island	9.6	0.2	-0.9	4.1	3.4
Nova Scotia	6.3	1.1	1.9	2.3	2.7
New Brunswick	1.3	7.8	2.4	4.3	3.2
Quebec	14.4	6.0	0.4	6.2	2.9
Ontario	4.5	1.3	-2.1	2.4	5.3
Manitoba	2.1	9.4	12.7	1.5	2.2
Saskatchewan	5.4	2.5	1.4	1.8	2.7
Alberta	7.3	10.8	1.1	4.2	3.6
British Columbia	6.2	1.9	1.8	3.3	3.2
Territories	11.5	8.7	8.1	7.4	4.5

Machinery and Equipment Investment
(millions of $71)

Post II-87 Reference Forecast	1988	1989	1990	88-92	93-05
	Average Annual Rates of Growth				
Canada	10.1	4.3	1.0	4.6	4.7
Newfoundland	22.4	20.9	7.0	8.7	4.0
Prince Edward Island	-5.5	3.7	-0.8	2.0	4.7
Nova Scotia	11.6	4.6	0.5	4.0	3.6
New Brunswick	9.9	7.2	3.1	6.2	4.1
Quebec	9.9	3.6	1.6	4.4	4.6
Ontario	9.8	1.8	0.4	4.3	4.5
Manitoba	6.9	7.3	4.0	3.2	3.9
Saskatchewan	8.9	7.1	1.0	5.2	4.3
Alberta	13.0	8.0	0.1	6.0	5.8
British Columbia	8.9	8.5	1.1	4.7	5.3
Territories	6.5	6.2	-3.0	6.3	2.9



TOTAL GROSS DOMESTIC PRODUCT
AVERAGE ANNUAL GROWTH RATES
(MILLIONS OF 1971 DOLLARS)



TOTAL GROSS DOMESTIC PRODUCT
PERCENTAGE CONTRIBUTION TO GROWTH
(MILLIONS OF 1971 DOLLARS)

2.6 Ontario

Major Indicators for Ontario

Post II-87 Reference Forecast	1987	1988	1989	1990	88-92	93-05
	Average Annual Rates of Growth					
Gross Domestic Product ($71)						
Total	4.6	3.7	2.7	0.4	2.8	2.6
Agriculture	3.8	3.2	2.1	2.3	2.6	2.0
Resource Extraction	10.5	2.2	2.9	5.4	2.1	2.5
Manufacturing	2.7	5.5	4.1	-0.6	4.1	3.3
Electrical Products	15.5	5.0	2.6	0.2	3.1	3.1
Motor Vehicles	-12.7	9.8	7.3	-1.4	6.7	3.6
Parts & Accessories	0.2	17.1	6.4	-3.6	9.3	2.8
Primary Metals	2.2	8.2	3.7	-2.0	4.7	3.0
Utilities	4.5	3.8	3.1	1.2	2.8	1.7
Electrical	6.2	4.1	3.1	1.4	2.9	1.6
Comm. & Personal Services	2.5	2.9	2.0	1.1	2.1	2.2
Employment						
Total	3.3	3.0	1.4	0.0	1.7	1.4
Agriculture	-4.1	2.1	1.5	3.3	2.5	1.5
Resource Extraction	12.2	-4.0	-2.1	0.4	-2.3	-1.0
Manufacturing	1.5	4.0	1.9	-1.7	1.6	0.0
Durables	5.1	4.0	1.8	-3.0	1.7	0.1
Nondurables	-2.8	4.1	2.0	0.0	1.4	-0.3
Utilities	2.6	2.3	1.2	-0.6	0.8	0.0
Comm. & Personal Services	4.7	3.7	2.6	1.3	2.6	2.3
GDP($71) per employed worker	1.3	0.7	1.3	0.4	1.1	1.2
Investment ($71)						
Nonresidential Structures	16.4	4.5	1.3	-2.1	2.4	5.3
Manufacturing	-7.0	13.9	5.2	-2.1	5.9	3.5
Utilities	-2.3	3.4	-10.2	-6.7	-1.9	4.4
Machinery and Equipment	22.0	9.8	1.8	0.4	4.3	4.5
Residential Structures	23.2	-6.4	-3.2	-3.6	-2.6	-0.4
Labour Force	2.4	1.9	1.5	1.0	1.6	1.2
Households	2.0	1.8	1.7	1.6	1.6	1.3
Unemployment	-9.3	-14.3	3.0	19.2	-0.5	-3.5
Personal Income ($C)	9.3	7.0	6.8	4.9	6.2	6.6
Labour Income	8.3	7.7	6.0	4.5	6.4	6.9
Labour Income per employed worker	4.9	4.6	4.5	4.4	4.6	5.4
Dwelling Starts ('000) (a)	105.2	85.7	75.4	69.1	74.5	64.8
Unemployment Rate (%) (a)	6.1	5.1	5.2	6.1	5.5	4.6

(a) Average

2.6.2 Near-term Expectations

In 1987, Ontario had an even better year than the preliminary data used in the Post I-87 forecast indicated. Real growth of the provincial economy now appears to have been a steamy 4.6 per cent, with nearly all major sectors showing strong gains. The notable exception was the automotive sector. Output volume of cars and trucks slumped by nearly 13 per cent from 1986 levels, while that of parts and accessories hardly registered any increase over the previous year's shipments.

But it now appears as if the gloom in the auto sector is over, at least for the very near term. This year and next, prospects for Ontario's auto and parts makers pick up. The downturn of the consumers' durables-buying cycle appears over in Canada and the U.S. and the North American love-affair with the automobile (now broadened to include trucks and vans) is blowing warm again. As a fraction of total output, the automotive sector may be small at just over 5 per cent, but a solid performance in Oshawa and Windsor feeds into healthy output projections of the industry's major suppliers: primary metals, chemicals, rubber.

This surge in demand is being met by vastly expanded capacity in the industry. General Motors last year completed a $1 billion modernization of its Oshawa truck plant and associated plants and, in the process, boosted capacity by about 30 per cent. GM is also in the throes of modernizing its auto assembly plant in Oshawa and this project, also valued at $1 billion, is slated for completion next winter. American Motors (now controlled by Chrysler) began production of a mid-sized car last year at a new $760-million plant in Brampton and hopes to make 150,000 cars a year by 1990. And several other, smaller plants owned by the Big Three in Ontario are being robotized as well.

Further increases in assembly capacity in Ontario are being provided by Asian producers. Toyota's $400-million auto plant in Cambridge will begin producing Corolla-type cars this summer, with full annual production of 50,000 cars being reached in 1990. In Alliston, Honda has already announced expansion plans worth $80 million for its recently opened $200-million car plant. When the additions are complete in 1989, planned yearly output will be 80,000 units. And in Ingersoll, the $500-million plant owned by Cami Automotive, a joint venture of GM and Suzuki, will begin production in 1988 and reach a planned annual capacity of 120,000 cars and 20,000 sport utility vehicles by late 1989.

Parts makers, both indigenous and Asian, are racing to build up capacity. Easily a dozen plants are springing up like mushrooms in Southern Ontario over the next couple of years. (For a listing, see the manufacturing section of Canadian Capital Projects. Most of these projects involve an investment of less than $100 million.)

Along with this heightened activity in the automotive sector over the next year, a far brighter trade picture is adding strength to other durables manufacturing industries. Primary metal industries (iron and steel mills, copper and aluminum rolling) have emerged from the low-growth

Overall, Ontario businesses in 1987 made 41 per cent of plant and equipment investment in the country. Last year, manufacturers continued the trend, begun in 1985, of cutting back on investment in structures, but in 1988 some of the losses incurred over the past three years should be recouped. In addition, Ontario will share in the country-wide surge in equipment investment, with manufacturers' spending in this area growing at about the same rate as structures investment.

The farming sector in the province showed a strong pickup last year after the slump of 1986. Although it generates a relatively small part of provincial GDP (an estimated 1.8 per cent last year), it nevertheless produces the largest provincial agricultural output. Because Ontario's farmers serve a diverse local market, more so than those of the Prairies, they are more shielded from the worst effects of the global farm crisis. Output of this sector tracks provincial activity reasonably closely in 1988-89.

Utilities growth continues strong, boosted by the demand created by the completion, in the next year or two, of major manufacturing plants and the Toronto-area construction boom. Ontario Hydro's Bruce B nuclear generating station and the repair of Pickering A have just been completed, although it may take until 1989 before transmission lines are built to take power from Bruce to market. As well, the first of four 880 MW units at Darlington is due to come into service later this year.

This year, Ontario is continuing to create jobs at the 3 per cent rate seen since 1984. Of the estimated 140,000 or so new jobs being generated in 1988, 56,000 are in community, business and personal services, 42,000 in manufacturing, 34,000 in retail and wholesale trade and 10,000 in finance, insurance and real estate. Mining, construction, and provincial administration are losing jobs. The labour force continues to grow, but at a slower rate than jobs, so that the unemployment rate should average 5.1 per cent this year. This is by far the lowest in the country, and is a rate not achieved by the province since 1974.

This tight labour market shows signs of increasing the upward pressure on wages. In some submarkets, such as certain skilled trades in construction, the market is far tighter than the average indicates. These construction workers are demanding substantial wage hikes in their next contracts and are prepared to strike for higher wages.

2.6.3 Medium-term Industrial Outlook

The biggest potential impact on the provincial economy over the next decade is the U.S. downturn, assumed to begin in latter half of 1989. This is caused by monetary and fiscal tightening, and the resulting drop in U.S. demand flattens Canada's export growth. In 1990, manufacturing output in the province contracts with the cutback in investment brought on by increases in interest rates and the dying-off of demand. Ontario's extreme vulnerability to such shifts in demand for its durables causes provincial output growth that year to creep forward by a miserable 0.4 per cent, the large proportion of their assembled-car output is destined for export south, where projections for car purchases have improved. The remaining new production will result in all plants, Big Three and Asian alike, operating at slightly lower utilization rates. The result is that there will not be a big shake-out in the industry in Canada.

This is a risk in our forecast for the industry in Canada and the situation requires close monitoring. At best, some of the more traditional parts makers, who have not yet adopted modern production techniques, may find it difficult to survive the next five years. But overall under our scenario, the entire automotive sector shows average gains of between 7 and 9 per cent (except, of course, in the downturn) for the period 1988-92.

In this outlook, the principal suppliers of raw materials, such as steel, to car makers also do well. Dofasco is considering adding a second continuous caster starting in 1989 for $400 million. Also being considered for an early 1990s start-up is a $500-million cold-roll steel mill that would use Japanese technology. The recent relaxation of pressure from U.S. steel producers on Canadian exports into their country also permits some gains in supplying U.S. markets other than the automotive sector.

Agriculture's outlook over this period is considerably brighter than in the previous five years of competition from U.S. corn growers and soft world markets. The sector will post gains around the provincial average, and far ahead of that average in 1990. While mining can expect a few years of moderate growth in this scenario, demand further out into the 1990s will be soft as the industry faces strong competition from low-cost producers in the Third World and substitution away from traditional materials in North America. Increasing mechanization in this industry lowers job requirements in this sector throughout the forecast. Further out, the sector will regain some of its buoyancy when world supplies begin to tighten.

Excepting, again, the downturn year, we expect strong growth in investment in plant and equipment in the medium term, particularly in manufacturing. Over the next five years, investment by Ontario Hydro is winding down after the huge buildup in the 1980s. The utility recently announced that it was going to accelerate the retubing of reactors 3 and 4 at Pickering, in a $500 million project spanning the period 1989-92. This outlook sees no further nuclear capacity being built after Darlington reaches peak capacity of 3,600 MW in 1992. We have assumed that capacity constraints will ensure that the utility goes ahead with all its announced projects such as the expansion of the Niagara Falls Plant and the building of the Little Jackfish River plant. Ontario will also see some of its electricity needs being met by hydro from Manitoba starting in 1998.

The same general trends for the tertiary sector outlined above continue in the longer run. Two out of every three jobs in the province are in services of one sort or another and by 2005, this fraction steadily increases to seven out of 10 jobs. In the mid-1970s, this was more like one in two. The personal, business and community services component's share moves from 31 per cent of total jobs to 37 per cent. Output of this sector increases steadily by a little over 2 per cent a year, while job

2.6.4 Conclusions

Apart from one or two exceptional years, this outlook sees Ontario as continuing in its role as leader in output growth and job creation between now and the end of the forecast period. The exceptional years occur during the U.S.-led growth pause beginning in mid-1989, when Ontario's growth machine, manufacturing, sputters. But, to change the metaphor, that's when the services' tortoise, concentrated as it is among small business, outperforms the manufacturing hare.

At risk in this provincial outlook is our optimistic view of the "car bubble." There is a chance of a shakeout as a result of over-capacity in the entire North American market, in which one or more Canadian assembly plants might close. The same excess-capacity problem is facing the parts industry and we may see the demise of many of the traditional, more labour-intensive plants.

This scenario, as mentioned, assumes that the free-trade deal is not confirmed. We judge that the implementation of the trade agreement, as signed last October, along with some investment it might provoke, as a net benefit for the province. It would, for instance, allow the Ontario to come through the end of the North American business cycle in far better shape than depicted here, even though the investment buildup likely to accompany the free-trade deal will only be a couple of years old by then.

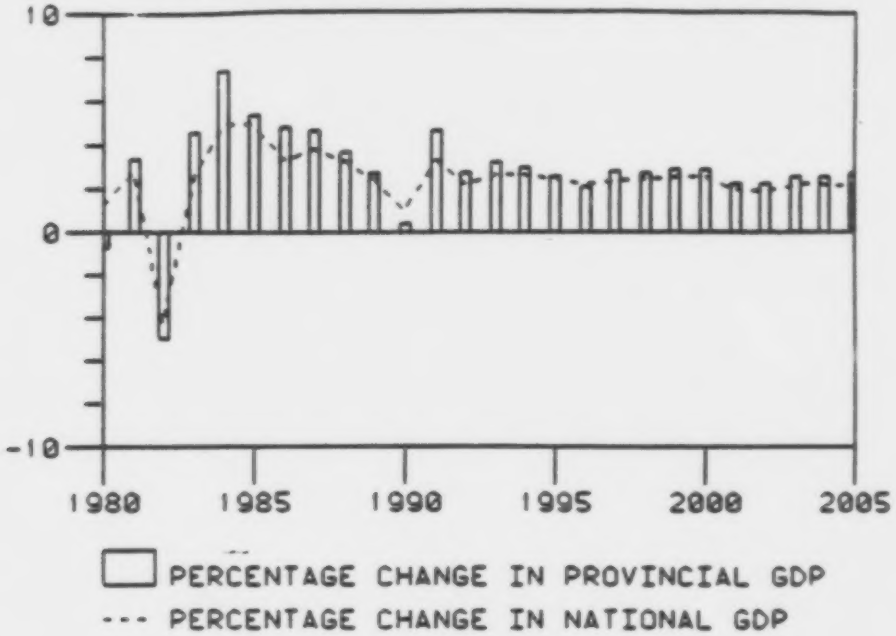
Further strengthening of metal prices augurs well for the depressed northern regions of the province. If, on the other hand, users of nickel and other metals are driven by price increases to substitute other materials, then demand and prices will soften and the north will continue to limp along. Labour income in the area might also be boosted by job opportunities afforded by the construction of James Bay II in Northern Quebec.

Also on the upside, it appears from recent data that the U.S. economy is performing even better than we assumed in our forecast. This will have the effect of raising the growth profile over the next few years and diminishing the effects of the end-of-decade growth pause.

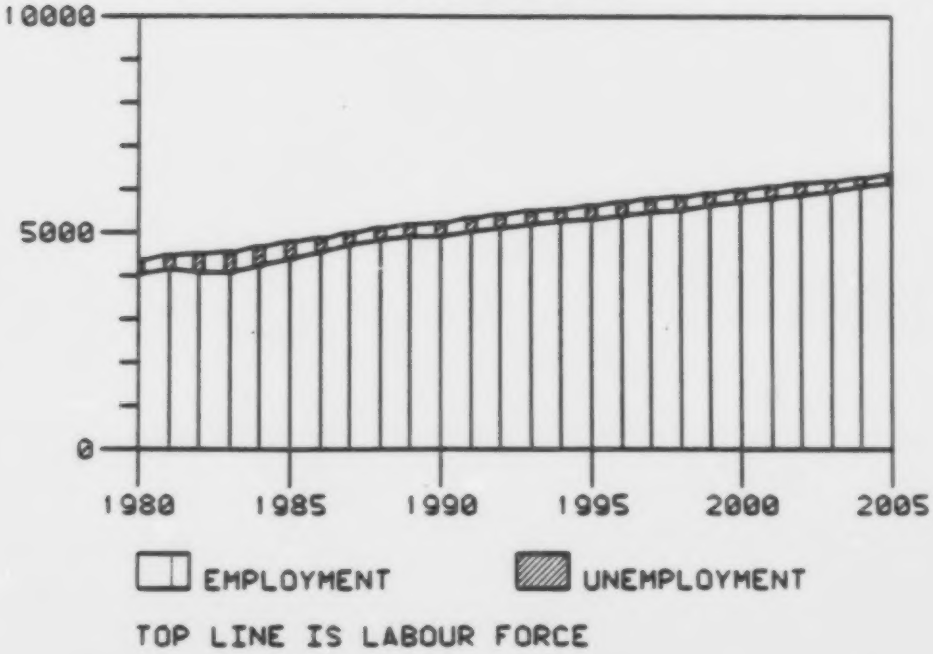
Some observers for the past year have been expressing concern that labour market tightness and sky-rocketing accommodation costs in the Toronto area could reverse the trend of slowing growth in prices. In April, the unemployment rate in Toronto reached 3.2 per cent, and that for the province 4.8 per cent, a 14-year low. This tightness is being accompanied by stronger wage demands by the construction unions.

Already, there are signs, early yet to be sure, that firms are becoming leery about setting up in the overheated Toronto-area economy. We are expecting that the high costs of accommodation and wage pressures in the Golden Triangle will force companies to consider locating further out.

ONTARIO
GROSS DOMESTIC PRODUCT ($1971)
AVERAGE ANNUAL RATES OF GROWTH



ONTARIO
LABOUR FORCE AND EMPLOYMENT
(THOUSANDS)



Major Indicators for Ontario

Post II-87 Reference Forecast	1987	1988	1989	1990	1991	1992
	Average Annual Rates of Growth					
Gross Domestic Product ($71)						
Total	4.6	3.7	2.7	0.4	4.7	2.7
Agriculture	3.8	3.2	2.1	2.3	4.5	0.8
Resource Extraction	10.5	2.2	2.9	5.4	-3.6	3.7
Manufacturing	2.7	5.5	4.1	-0.6	8.3	3.4
Electrical Products	15.5	5.0	2.6	0.2	5.9	2.4
Motor Vehicles	-12.7	9.8	7.3	-1.4	11.1	7.3
Parts & Accessories	0.2	17.1	6.4	-3.6	24.4	4.4
Primary Metals	2.2	8.2	3.7	-2.0	10.7	3.2
Utilities	4.5	3.8	3.1	1.2	3.4	2.4
Electrical	6.2	4.1	3.1	1.4	3.4	2.5
Comm. & Personal Services	2.5	2.9	2.0	1.1	2.7	2.1
Employment						
Total	3.3	3.0	1.4	0.0	2.8	1.5
Agriculture	-4.1	2.1	1.5	3.3	4.3	1.6
Resource Extraction	12.2	-4.0	-2.1	0.4	-5.1	-0.7
Manufacturing	1.5	4.0	1.9	-1.7	3.6	0.3
Durables	5.1	4.0	1.8	-3.0	5.4	0.5
Nondurables	-2.8	4.1	2.0	0.0	1.2	-0.1
Utilities	2.6	2.3	1.2	-0.6	0.9	0.1
Comm. & Personal Services	4.7	3.7	2.6	1.3	3.0	2.3
GDP($71) per employed worker	1.3	0.7	1.3	0.4	1.9	1.2
Investment ($71)						
Nonresidential Structures	16.4	4.5	1.3	-2.1	3.4	5.3
Manufacturing	-7.0	13.9	5.2	-2.1	6.7	6.4
Utilities	-2.3	3.4	-10.2	-6.7	12.8	-6.9
Machinery and Equipment	22.0	9.8	1.8	0.4	4.1	5.8
Residential Structures	23.2	-6.4	-3.2	-3.6	-0.1	0.4
Labour Force	2.4	1.9	1.5	1.0	2.0	1.5
Households	2.0	1.8	1.7	1.6	1.6	1.5
Unemployment	-9.3	-14.3	3.0	19.2	-9.6	2.4
Personal Income ($C)	9.3	7.0	6.8	4.9	6.8	5.5
Labour Income	8.3	7.7	6.0	4.5	8.0	6.0
Labour Income per employed worker	4.9	4.6	4.5	4.4	5.1	4.5
Dwelling Starts ('000) (a)	105.2	85.7	75.4	69.1	70.7	71.7
Unemployment Rate (%) (a)	6.1	5.1	5.2	6.1	5.4	5.5

(a) Average

Major Indicators for Ontario

Post II-87 Reference Forecast	1993	1994	1995	1996	1997	1998
	Average Annual Rates of Growth					
Gross Domestic Product ($71)						
Total	3.2	3.0	2.5	2.1	2.8	2.8
Agriculture	1.5	1.6	1.8	2.1	1.9	2.4
Resource Extraction	1.1	1.7	2.2	1.2	-0.9	0.7
Manufacturing	4.2	3.8	3.2	2.6	3.8	3.6
Electrical Products	4.0	3.7	2.9	1.9	4.2	3.7
Motor Vehicles	6.8	4.2	4.1	4.4	2.6	3.2
Parts & Accessories	4.2	3.7	0.6	-0.7	5.9	2.8
Primary Metals	3.5	3.5	2.9	2.2	4.0	3.9
Utilities	1.3	2.3	2.8	1.3	1.4	1.7
Electrical	1.0	2.2	1.8	1.0	1.0	1.6
Comm. & Personal Services	2.4	2.5	2.2	2.1	2.2	2.3
Employment						
Total	1.7	1.4	1.1	0.9	1.5	1.4
Agriculture	1.1	0.1	0.4	0.5	0.9	0.9
Resource Extraction	-2.1	-2.6	-2.5	-4.2	-5.0	-3.2
Manufacturing	0.4	-0.3	-0.8	-0.9	0.0	0.0
Durables	0.7	-0.4	-1.2	-1.4	0.2	0.3
Nondurables	0.1	-0.2	-0.2	-0.2	-0.1	-0.4
Utilities	-0.6	0.0	-0.3	-0.8	-0.6	0.1
Comm. & Personal Services	2.6	2.6	2.3	2.2	2.4	2.4
GDP($71) per employed worker	1.5	1.6	1.4	1.2	1.3	1.3
Investment ($71)						
Nonresidential Structures	7.1	5.1	3.3	1.3	4.0	5.7
Manufacturing	12.9	7.6	0.9	1.6	2.9	4.2
Utilities	-6.6	-15.6	2.4	-1.7	10.1	9.7
Machinery and Equipment	6.6	4.5	4.1	2.4	3.6	4.5
Residential Structures	-0.6	-0.7	-1.1	-1.0	-0.7	-0.9
Labour Force	1.5	1.3	1.2	1.0	1.3	1.2
Households	1.5	1.4	1.4	1.4	1.4	1.4
Unemployment	-1.6	0.6	3.5	3.6	-0.8	-3.4
Personal Income ($C)	5.8	5.8	6.3	5.7	6.5	6.8
Labour Income	6.3	5.9	6.1	5.7	6.5	7.0
Labour Income per employed worker	4.6	4.5	5.0	4.8	5.0	5.5
Dwelling Starts ('000) (a)	70.0	68.7	66.1	64.7	62.5	63.7
Unemployment Rate (%) (a)	5.3	5.3	5.4	5.5	5.4	5.2

(a) Average

Major Indicators for Ontario

Post II-87 Reference Forecast	1999	88-92	93-97	98-05	93-05	88-05
	Average Annual Rates of Growth					
Gross Domestic Product ($71)						
Total	2.9	2.8	2.7	2.6	2.6	2.7
Agriculture	2.5	2.6	1.8	2.2	2.0	2.2
Resource Extraction	4.7	2.1	1.1	3.4	2.5	2.4
Manufacturing	3.6	4.1	3.5	3.1	3.3	3.5
Electrical Products	3.4	3.1	3.3	3.0	3.1	3.1
Motor Vehicles	3.2	6.7	4.4	3.1	3.6	4.5
Parts & Accessories	3.1	9.3	2.7	2.9	2.8	4.6
Primary Metals.	3.5	4.7	3.2	2.9	3.0	3.5
Utilities	1.5	2.8	1.6	1.8	1.7	2.0
Electrical	1.4	2.9	1.4	1.7	1.6	1.9
Comm. & Personal Services	2.2	2.1	2.3	2.1	2.2	2.2
Employment						
Total	1.7	1.7	1.3	1.5	1.4	1.5
Agriculture	1.6	2.5	0.6	2.0	1.5	1.8
Resource Extraction	0.6	-2.3	-3.3	0.5	-1.0	-1.3
Manufacturing	0.3	1.6	-0.3	0.1	0.0	0.4
Durables	0.7	1.7	-0.4	0.5	0.1	0.6
Nondurables	-0.1	1.4	-0.1	-0.3	-0.3	0.2
Utilities	-0.1	0.8	-0.4	0.3	0.0	0.2
Comm. & Personal Services	2.4	2.6	2.4	2.2	2.3	2.4
GDP($71) per employed worker	1.2	1.1	1.4	1.1	1.2	1.2
Investment ($71)						
Nonresidential Structures	6.1	2.4	4.1	6.0	5.3	4.5
Manufacturing	3.9	5.9	5.1	2.5	3.5	4.1
Utilities	10.1	-1.9	-2.7	9.0	4.4	2.6
Machinery and Equipment	5.1	4.3	4.2	4.7	4.5	4.5
Residential Structures	0.6	-2.6	-0.8	-0.1	-0.4	-1.0
Labour Force	1.2	1.6	1.3	1.2	1.2	1.3
Households	1.3	1.6	1.4	1.3	1.3	1.4
Unemployment	-6.4	-0.5	1.0	-6.2	-3.5	-2.7
Personal Income ($C)	6.4	6.2	6.0	6.9	6.6	6.5
Labour Income	7.0	6.4	6.1	7.5	6.9	6.8
Labour Income per employed worker	5.3	4.6	4.8	5.8	5.4	5.2
Dwelling Starts ('000) (a)	64.6	74.5	66.4	63.7	64.8	67.5
Unemployment Rate (%) (a)	4.8	5.5	5.4	4.0	4.6	4.8

(a) Average

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Post II-87 Reference Forecast		1987	1988	1989	1990	1991	1992	1993	1994
		Average Annual Rates of Growth							
FTOTYK	All Industries	4.6	3.7	2.7	0.4	4.7	2.7	3.2	3.0
FAGRYK	Agriculture	3.8	3.2	2.1	2.3	4.5	0.8	1.5	1.6
FFORYK	Forestry	4.6	4.6	2.1	1.3	3.5	2.6	2.7	2.9
FFSHYK	Fishing	-5.0	1.7	0.9	0.7	-0.7	-0.9	0.7	5.1
FRESYK	Resource Extraction	10.5	2.2	2.9	5.4	-3.6	3.7	1.1	1.7
FRE1YK	Metals	13.1	1.9	4.6	6.7	-7.0	4.6	1.6	3.0
FRE2YK	Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FRE3YK	Petroleum & Gas	1.3	2.5	-0.1	1.0	6.1	0.4	0.8	2.4
FRE4YK	Non-metals	15.0	2.2	-5.7	-0.9	14.1	-1.1	-3.4	-6.6
FRE5YK	Mining Services	-38.2	9.1	2.4	8.2	6.8	5.9	8.0	4.3
FMANYK	Manufacturing	2.7	5.5	4.1	-0.6	8.3	3.4	4.2	3.8
FMDUYK	Durables	2.3	7.3	4.5	-1.7	11.3	4.1	4.8	4.2
FMNDYK	Nondurables	3.2	2.9	3.6	1.0	3.9	2.2	3.1	3.2
FCONYK	Construction	19.3	0.2	-0.5	-2.2	2.2	3.2	4.3	3.1
FTSPYK	Transport., Stor. & Comm.	4.5	3.9	3.0	0.9	4.7	3.1	3.6	3.3
FTTTYK	Transportation	2.4	3.7	2.7	0.3	4.8	3.0	3.6	3.3
FTSTYK	Storage	17.5	3.9	2.9	0.4	4.7	3.1	3.7	3.3
FTCTYK	Communication	6.6	4.3	3.4	1.5	4.6	3.1	3.6	3.3
FUTLYK	Utilities	4.5	3.8	3.1	1.2	3.4	2.4	1.3	2.3
FTRDYK	Trade	8.3	3.1	2.1	-0.1	3.6	2.4	2.9	2.5
FFITYK	Finance	5.2	3.6	3.0	1.3	3.9	2.6	2.8	2.6
FSVCYK	Services	2.5	2.9	2.0	1.1	2.7	2.1	2.4	2.5
FSPRYK	Private	3.7	3.7	2.8	0.8	3.7	2.9	3.2	3.1
FSEDYK	Education	1.3	2.1	0.4	0.8	1.1	0.7	1.3	1.1
FSHEYK	Health	1.1	1.8	1.9	1.8	1.8	1.7	1.7	2.5
FADTYK	Public Administration	0.1	1.6	1.0	1.9	1.3	1.4	1.8	1.9
FADFYK	Federal Admin.	-1.1	0.9	0.6	2.2	1.2	1.6	2.2	2.2
FADPYK	Provincial Admin.	7.4	1.7	0.7	1.4	1.1	0.9	1.2	1.7
FADMYK	Municipal Admin.	-4.1	2.7	2.4	1.9	1.7	1.6	1.5	1.5

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Post II-87 Reference Forecast		1995	1996	1997	1988-92	1993-97	1998-05	1988-97	1988-05
				Average Annual Rates of Growth					
FTOTYK	All Industries	2.5	2.1	2.8	2.8	2.7	2.6	2.8	2.7
FAGRYK	Agriculture	1.8	2.1	1.9	2.6	1.8	2.2	2.2	2.2
FFORYK	Forestry	2.9	2.3	2.3	2.8	2.6	2.6	2.7	2.7
FFSHYK	Fishing	3.7	3.5	1.0	0.3	2.8	3.2	1.6	2.3
FRESYK	Resource Extraction	2.2	1.2	-0.9	2.1	1.1	3.4	1.6	2.4
FRE1YK	Metals	2.3	1.9	-1.9	2.0	1.4	3.1	1.7	2.3
FRE2YK	Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FRE3YK	Petroleum & Gas	6.1	3.1	0.6	2.0	2.6	0.5	2.3	1.5
FRE4YK	Non-metals	1.7	-2.6	5.5	1.5	-1.2	5.1	0.2	2.3
FRE5YK	Mining Services	1.4	-0.6	-1.0	5.5	2.4	3.6	3.9	3.8
FMANYK	Manufacturing	3.2	2.6	3.8	4.1	3.5	3.1	3.8	3.5
FMDUYK	Durables	3.3	2.6	4.5	5.0	3.9	3.5	4.4	4.0
FMNDYK	Nondurables	2.9	2.5	2.8	2.7	2.9	2.4	2.8	2.6
FCONYK	Construction	2.1	0.6	2.6	0.6	2.6	4.3	1.6	2.8
FTSPYK	Transport., Stor. & Comm.	2.7	2.1	2.7	3.1	2.9	2.6	3.0	2.8
FTTTYK	Transportation	2.7	2.0	2.6	2.9	2.8	2.6	2.9	2.8
FTSTYK	Storage	2.7	2.3	2.8	3.0	3.0	2.9	3.0	2.9
FTCTYK	Communication	2.8	2.1	2.8	3.4	2.9	2.5	3.1	2.9
FUTLYK	Utilities	2.0	1.3	1.4	2.8	1.6	1.8	2.2	2.0
FTRDYK	Trade	2.0	1.6	2.1	2.2	2.2	2.3	2.2	2.2
FFITYK	Finance	2.4	2.1	2.7	2.9	2.5	2.4	2.7	2.6
FSVCYK	Services	2.2	2.1	2.2	2.1	2.3	2.1	2.2	2.2
FSPRYK	Private	2.7	2.4	2.8	2.8	2.8	2.5	2.8	2.7
FSEDYK	Education	1.3	1.5	1.3	1.0	1.3	1.5	1.2	1.3
FSHEYK	Health	1.8	1.7	1.7	1.8	1.9	1.7	1.8	1.8
FADTYK	Public Administration	1.9	1.9	1.8	1.5	1.9	1.6	1.7	1.6
FADFYK	Federal Admin.	2.1	1.9	1.9	1.3	2.1	1.4	1.7	1.6
FADPYK	Provincial Admin.	1.8	1.8	1.5	1.2	1.6	1.9	1.4	1.6
FADMYK	Municipal Admin.	1.7	1.8	1.8	2.1	1.7	1.7	1.9	1.8

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Post II-87 Reference Forecast		1987	1988	1989	1990	1991	1992	1993	1994
				Average Annual Rates of Growth					
FMANYK	Total-All Manufacturing	2.7	5.5	4.1	-0.6	8.3	3.4	4.2	3.8
FMFTYK	Food And Beverages	1.0	1.5	2.2	0.0	3.2	1.2	2.1	2.0
FM02YK	Tobacco	-6.8	-0.7	0.4	-3.4	0.1	-3.5	-4.0	-4.5
FM03YK	Rubber	4.3	4.7	4.4	0.5	6.8	3.2	4.0	3.8
FM04YK	Leather	-9.7	4.4	3.0	-0.3	3.3	2.1	2.1	1.9
FM05YK	Textiles	7.3	3.1	4.9	0.3	5.1	3.4	3.9	3.3
FM67YK	Knitting & Clothing	5.0	4.6	3.1	-0.1	4.3	2.9	2.7	1.9
FM08YK	Wood	9.9	-1.7	-0.4	-2.1	9.6	2.2	-0.1	0.8
FM09YK	Furniture	2.7	5.4	3.6	-0.9	4.8	2.9	4.2	4.1
FMPTYK	Pulp & Paper	4.3	2.5	3.5	1.9	3.6	2.1	3.1	3.1
FM11YK	Printing & Publishing	5.2	2.2	2.9	1.8	3.2	1.9	2.7	2.9
FMMTYK	Primary Metals	2.2	8.2	3.7	-2.0	10.7	3.2	3.5	3.5
FM13YK	Metal Fabricating	6.5	4.4	3.1	-1.6	8.1	3.5	5.0	4.6
FM14YK	Machinery	3.1	3.1	3.8	-1.9	10.0	3.2	6.4	7.0
FMTTYK	Transportation Eqpt.-Total	-6.6	12.5	6.9	-2.4	16.9	5.8	5.5	4.0
FMT0YK	- Motor Vehicles	-12.7	9.8	7.3	-1.4	11.1	7.3	6.8	4.2
FMT3YK	- Parts & Accessories	0.2	17.1	6.4	-3.6	24.4	4.4	4.2	3.7
FMT4YK	- Aircraft & Parts	-0.6	-7.8	8.4	6.1	4.6	2.6	5.9	3.7
FMT5YK	- Railroad Rolling Stock	3.0	1.7	2.7	-24.0	24.5	15.4	16.7	12.0
FMT6YK	- Shipbuilding	-22.0	32.5	22.1	0.2	7.6	7.3	-19.5	-1.1
FMT7YK	- Miscellaneous	8.6	19.4	8.0	5.6	6.5	5.4	6.5	5.0
FM16YK	Electrical Products	15.5	5.0	2.6	0.2	5.5	2.4	4.0	3.7
FM17YK	Non-metallic Minerals	10.6	2.7	3.5	-1.6	7.3	3.3	5.1	4.0
FM18YK	Petroleum & Coal Products	6.6	4.1	2.1	-8.1	15.0	3.2	3.9	2.7
FMCTYK	Chemicals	2.8	2.1	3.9	2.3	1.9	1.7	3.0	3.7
FM20YK	Miscellaneous	0.7	7.6	7.8	3.5	6.3	4.7	6.3	6.2
FMDUYK	Durables	2.3	7.3	4.5	-1.7	11.3	4.1	4.8	4.2
FMNDYK	Nondurables	3.2	2.9	3.6	1.0	3.9	2.2	3.1	3.2

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Post II-87 Reference Forecast		1995	1996	1997	1988-92	1993-97	1998-05	1988-97	1988-05
				Average Annual Rates of Growth					
FMANYK	Total-All Manufacturing	3.2	2.6	3.8	4.1	3.5	3.1	3.8	3.5
FMFTYK	Food And Beverages	2.2	2.3	2.2	1.6	2.2	2.2	1.9	2.0
FM02YK	Tobacco	-4.7	-5.1	-5.5	-1.4	-4.8	-9.5	-3.1	-6.0
FM03YK	Rubber	3.2	2.6	3.6	3.9	3.5	2.8	3.7	3.3
FM04YK	Leather	1.6	1.7	1.2	2.5	1.7	1.0	2.1	1.6
FM05YK	Textiles	3.2	2.9	2.7	3.3	3.2	2.8	3.3	3.1
FM67YK	Knitting & Clothing	1.7	1.8	1.3	2.9	1.9	1.3	2.4	1.9
FM08YK	Wood	2.3	2.3	3.2	1.4	1.7	2.9	1.6	2.2
FM09YK	Furniture	3.3	2.8	3.1	3.1	3.5	3.4	3.3	3.3
FMPTYK	Pulp & Paper	3.1	2.6	2.6	2.7	2.9	2.5	2.8	2.7
FM11YK	Printing & Publishing	2.9	2.3	3.1	2.4	2.8	2.3	2.6	2.5
FMMTYK	Primary Metals	2.9	2.2	4.0	4.7	3.2	2.9	3.9	3.5
FM13YK	Metal Fabricating	3.9	2.8	4.6	3.5	4.2	3.9	3.8	3.8
FM14YK	Machinery	6.8	5.0	7.2	3.6	6.5	5.3	5.0	5.1
FMTTYK	Transportation Eqpt.-Total	2.5	2.1	4.1	7.8	3.6	3.0	5.7	4.5
FMT0YK	- Motor Vehicles	4.1	4.4	2.6	6.7	4.4	3.1	5.6	4.5
FMT3YK	- Parts & Accessories	0.6	-0.7	5.9	9.3	2.7	2.9	6.0	4.6
FMT4YK	- Aircraft & Parts	4.3	2.1	2.7	2.6	3.7	3.7	3.2	3.4
FMT5YK	- Railroad Rolling Stock	7.7	1.3	4.9	2.7	8.4	3.8	5.5	4.7
FMT6YK	- Shipbuilding	5.1	49.5	-4.6	13.4	3.6	4.4	8.4	6.6
FMT7YK	- Miscellaneous	4.9	3.9	5.0	8.8	5.1	3.6	6.9	5.5
FM16YK	Electrical Products	2.9	1.9	4.2	3.1	3.3	3.0	3.2	3.1
FM17YK	Non-metallic Minerals	3.7	2.8	3.4	3.0	3.8	3.7	3.4	3.5
FM18YK	Petroleum & Coal Products	1.9	1.4	2.8	3.0	2.5	2.5	2.7	2.6
FMCTYK	Chemicals	3.2	2.6	2.7	2.4	3.1	2.2	2.7	2.5
FM20YK	Miscellaneous	5.4	4.1	5.4	6.0	5.5	4.1	5.7	5.0
FMDUYK	Durables	3.3	2.6	4.5	5.0	3.9	3.5	4.4	4.0
FMNDYK	Nondurables	2.9	2.5	2.8	2.7	2.9	2.4	2.8	2.6

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Post II-87 Reference Forecast		1987	1988	1989	1990	1991	1992	1993	1994
				Average Annual Rates of Growth					
FTOTET	All Industries	3.3	3.0	1.4	0.0	2.8	1.5	1.7	1.4
FAGRET	Agriculture	-4.1	2.1	1.5	3.3	4.3	1.6	1.1	0.1
FFORET	Forestry	2.2	6.8	0.6	-1.2	-5.1	-1.5	-1.6	-3.1
FFSHET	Fishing	-3.8	12.2	9.7	9.2	6.4	4.6	4.9	6.8
FRESET	Mineral Resources	12.2	-4.0	-2.1	0.4	-5.1	-0.7	-2.1	-2.6
FMANET	Manufacturing	1.5	4.0	1.9	-1.7	3.6	0.3	0.4	-0.3
FMDUET	Durables	5.1	4.0	1.8	-3.0	5.4	0.5	0.7	-0.4
FMNDET	Nondurables	-2.8	4.1	2.0	0.0	1.2	-0.1	0.1	-0.2
FCONET	Construction	8.2	-3.1	-3.4	-0.8	3.8	4.5	5.3	3.9
FTSPET	Transport. & Stor. & Comm.	-2.5	1.4	-0.7	-2.5	0.0	-1.0	-0.6	-0.5
FTTSET	Transportation & Storage	-3.4	0.7	-2.5	-4.3	-1.8	-3.0	-2.7	-2.5
FTCTET	Communications	-1.1	2.5	2.1	-0.1	2.5	1.5	2.0	1.9
FUTLET	Utilities	2.6	2.3	1.2	-0.6	0.9	0.1	-0.6	0.0
FTRDET	Trade	3.1	4.2	1.7	0.2	3.1	1.7	1.9	1.5
FFITET	Finance	10.1	3.3	1.5	0.1	2.3	1.2	1.3	1.1
FSVCET	Services	4.7	3.7	2.6	1.3	3.0	2.3	2.6	2.6
FSPRET	Private Commercial	4.1	5.1	3.7	1.4	4.4	3.4	3.7	3.6
FSEDET	Education	4.6	2.1	-0.1	0.1	0.3	-0.1	0.5	0.2
FSHEET	Health	6.0	2.0	2.1	2.0	1.9	1.7	1.7	1.9
FADTET	Public Administration	-0.5	0.2	-0.1	0.8	0.3	0.5	0.9	1.1
FADFET	Federal Admin.	-4.3	-1.1	-1.0	1.0	0.2	0.8	1.7	1.9
FADPET	Provincial Admin.	14.9	0.0	-1.2	-0.3	-0.6	-0.8	-0.5	-0.1
FADMET	Municipal Admin.	-6.8	1.8	1.9	1.4	1.2	1.2	1.0	1.0

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Post II-87 Reference Forecast		1995	1996	1997	1988-92	1993-97	1998-05	1988-97	1988-05
					Average Annual Rates of Growth				
FTOTET	All Industries	1.1	0.9	1.5	1.7	1.3	1.5	1.5	1.5
FAGRET	Agriculture	0.4	0.5	0.9	2.5	0.6	2.0	1.6	1.8
FFORET	Forestry	-4.1	-4.8	-5.5	-0.1	-3.8	-2.2	-2.0	-2.1
FFSHET	Fishing	5.4	4.7	3.1	8.4	5.0	2.4	6.7	4.8
FRESET	Mineral Resources	-2.5	-4.2	-5.0	-2.3	-3.3	0.5	-2.8	-1.3
FMANET	Manufacturing	-0.8	-0.9	0.0	1.6	-0.3	0.1	0.6	0.4
FMDUET	Durables	-1.2	-1.4	0.2	1.7	-0.4	0.5	0.6	0.6
FMNDET	Nondurables	-0.2	-0.2	-0.1	1.4	-0.1	-0.3	0.6	0.2
FCONET	Construction	2.6	1.2	3.4	0.2	3.3	4.5	1.7	2.9
FTSPET	Transport. & Stor. & Comm.	-0.5	-0.7	0.1	-0.6	-0.4	1.2	-0.5	0.3
FTTSET	Transportation & Storage	-2.4	-2.6	-1.6	-2.2	-2.4	0.3	-2.3	-1.1
FTCTET	Communications	1.7	1.4	1.9	1.7	1.8	2.1	1.7	1.9
FUTLET	Utilities	-0.3	-0.8	-0.6	0.8	-0.4	0.3	0.2	0.2
FTRDET	Trade	1.2	1.1	1.6	2.2	1.5	0.9	1.8	1.4
FFITET	Finance	1.0	0.9	1.7	1.7	1.2	1.5	1.4	1.5
FSVCET	Services	2.3	2.2	2.4	2.6	2.4	2.2	2.5	2.4
FSPRET	Private Commercial	3.2	2.9	3.2	3.6	3.3	2.8	3.4	3.2
FSEDET	Education	0.4	0.7	0.4	0.5	0.4	1.5	0.4	0.9
FSHEET	Health	1.6	1.6	1.5	1.9	1.6	0.9	1.8	1.4
FADTET	Public Administration	1.2	1.2	1.1	0.3	1.1	1.0	0.7	0.8
FADFET	Federal Admin.	2.0	1.8	1.8	0.0	1.9	1.1	0.9	1.0
FADPET	Provincial Admin.	0.0	0.2	-0.2	-0.6	-0.1	0.9	-0.3	0.2
FADMET	Municipal Admin.	1.1	1.2	1.3	1.5	1.1	1.0	1.3	1.2

APPENDIX D

DETAILED ASSUMPTIONS, TOTAL AND BY SECTOR, BY SCENARIO

TOTAL, ALL INDUSTRIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	785.34	780.54	764.31	781.22	795.59	87.89	70.78	72.13	72.08
Change 1987 Capital Stock	684.41	684.41	684.41	684.41	684.41	0.00	0.00	0.00	0.00
Change 1988 Stock	21.46	21.46	21.46	21.46	21.46	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	79.48	74.68	58.45	75.36	89.73	87.89	70.78	72.13	72.08
Capital Costs ($current)	842.44	867.05	881.10	938.30	987.43	112.90	94.95	101.30	106.59
Capital Costs ($71)	236.06	234.90	230.29	235.00	239.02	25.99	20.99	21.38	21.32
ANNUAL CURRENT EXPENSES ($current)									
Total	235.18	456.71	670.08	900.33	1148.22	1180.28	1240.96	1288.44	1355.76
Operating	115.16	237.31	366.55	509.08	660.63	699.14	740.57	782.72	832.82
Depreciation	100.94	199.62	282.94	369.81	465.43	480.32	499.51	504.80	521.95
Ministry Expenditures	19.09	19.78	20.59	21.44	22.16	0.82	0.87	0.92	0.98
Current Expenses as % of Ontario GDP	0.11	0.20	0.27	0.34	0.40	0.39	0.39	0.38	0.37

ONE STUDY, SCEN-A, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	70.53	86.35	93.67	101.39	69.82	91.34	113.81	135.00
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	70.53	86.35	93.67	101.39	69.82	91.34	113.81	135.00
Capital Costs ($current)	108.92	139.22	159.34	180.29	135.36	186.01	240.37	297.86
Capital Costs ($71)	20.76	25.34	27.61	30.04	20.74	26.94	33.56	39.85
ANNUAL CURRENT EXPENSES ($current)								
Total	1431.99	1528.23	1610.61	1715.57	1802.31	1932.79	2010.42	2157.39
Operating	887.25	946.56	1012.18	1087.00	1161.13	1253.47	1354.76	1470.09
Depreciation	543.70	550.63	565.91	594.39	605.20	641.25	650.24	681.47
Ministry Expenditures	1.05	31.04	32.51	34.18	35.98	38.08	5.42	5.82
Current Expenses as % of Ontario GDP	0.37	0.37	0.36	0.36	0.35	0.35	0.33	0.33

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	0.24	0.24	0.23	0.23	0.23	0.02	0.02	0.02	0.02
Change 1987 Capital Stock	0.21	0.21	0.21	0.21	0.21	0.00	0.00	0.00	0.00
Change 1988 Stock	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Capital Costs ($current)	0.27	0.27	0.27	0.29	0.30	0.03	0.03	0.03	0.03
Nonresidential Structures	0.20	0.21	0.22	0.22	0.23	0.03	0.02	0.02	0.02
Machinery and Equipment	0.07	0.05	0.06	0.07	0.07	0.01	0.01	0.01	0.01
Capital Costs ($71)	0.08	0.08	0.08	0.08	0.08	0.01	0.01	0.01	0.01
Nonresidential Structures	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.00	0.00
Machinery and Equipment	0.02	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)									
Total	1.36	2.79	4.30	5.92	7.63	8.05	8.52	8.96	9.50
Operating	1.33	2.72	4.20	5.79	7.47	7.88	8.35	8.79	9.32
Depreciation	0.04	0.07	0.10	0.13	0.16	0.17	0.17	0.17	0.18
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.03	0.05	0.08	0.10	0.12	0.12	0.12	0.12	0.13
2-Digit, Ontario	2.71	5.25	7.49	9.74	11.79	11.51	11.34	11.65	11.94

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.03
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.03
Capital Costs ($current)	0.04	0.04	0.02	0.04	0.05	0.07	0.07	0.08
Nonresidential Structures	0.03	0.03	0.02	0.03	0.04	0.05	0.06	0.06
Machinery and Equipment	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.02
Capital Costs ($71)	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Nonresidential Structures	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)								
Total	10.13	10.75	11.33	12.07	12.93	13.97	15.04	16.21
Operating	9.95	10.56	11.14	11.87	12.72	13.75	14.82	15.98
Depreciation	0.19	0.19	0.19	0.20	0.21	0.22	0.22	0.23
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.13	0.14	0.14	0.14	0.15	0.16	0.16	0.17
2-Digit, Ontario	12.35	12.56	12.81	13.29	13.98	14.59	15.21	15.92

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	24.95	24.74	24.93	24.68	24.78	1.69	1.32	1.58	1.66
Change 1987 Capital Stock	22.02	22.02	22.02	22.02	22.02	0.00	0.00	0.00	0.00
Change 1988 Stock	0.69	0.69	0.69	0.69	0.69	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.24	2.03	2.22	1.97	2.07	1.69	1.32	1.58	1.66
Capital Costs ($current)	27.34	28.47	30.04	31.18	32.51	2.31	1.89	2.34	2.59
Nonresidential Structures	4.24	4.24	5.05	5.35	6.05	0.42	0.36	0.49	0.60
Machinery and Equipment	23.10	24.22	24.99	25.83	26.45	1.88	1.53	1.85	1.99
Capital Costs ($71)	7.88	7.81	7.87	7.80	7.83	0.53	0.42	0.50	0.52
Nonresidential Structures	1.25	1.24	1.42	1.44	1.56	0.11	0.09	0.11	0.13
Machinery and Equipment	6.62	6.58	6.46	6.36	6.27	0.43	0.33	0.39	0.39
ANNUAL CURRENT EXPENSES ($current)									
Total	8.68	17.64	26.67	36.12	46.14	47.92	50.05	51.73	54.18
Operating	5.02	10.35	16.17	22.38	28.89	30.28	31.83	33.42	35.34
Depreciation	3.67	7.30	10.51	13.74	17.26	17.64	18.21	18.31	18.84
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.06	0.13	0.18	0.23	0.28	0.28	0.28	0.28	0.28
2-Digit, Ontario	0.14	0.29	0.40	0.51	0.63	0.63	0.64	0.63	0.63

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	1.62	2.07	2.17	1.88	2.07	2.40	2.21	2.20
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.62	2.07	2.17	1.88	2.07	2.40	2.21	2.20
Capital Costs ($current)	2.67	3.61	3.98	3.66	4.24	5.24	5.12	5.41
Nonresidential Structures	0.67	0.93	1.02	0.93	1.06	1.27	1.19	1.28
Machinery and Equipment	2.00	2.68	2.96	2.73	3.18	3.97	3.92	4.12
Capital Costs ($71)	0.51	0.66	0.69	0.60	0.65	0.76	0.70	0.70
Nonresidential Structures	0.14	0.18	0.19	0.17	0.18	0.20	0.18	0.18
Machinery and Equipment	0.37	0.47	0.49	0.43	0.47	0.56	0.52	0.51
ANNUAL CURRENT EXPENSES ($current)								
Total	56.98	59.39	62.26	65.68	69.03	73.75	77.32	81.73
Operating	37.44	39.70	42.16	44.82	47.75	51.28	54.83	58.65
Depreciation	19.54	19.69	20.11	20.87	21.27	22.47	22.49	23.09
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27
2-Digit, Ontario	0.63	0.62	0.61	0.62	0.61	0.61	0.60	0.60

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoriing Expenses

OME STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	3.50	3.49	3.46	3.46	3.49	0.42	0.47	0.49	0.50
Change 1987 Capital Stock	3.04	3.04	3.04	3.04	3.04	0.00	0.00	0.00	0.00
Change 1988 Stock	0.09	0.09	0.09	0.09	0.09	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.37	0.36	0.33	0.33	0.36	0.42	0.47	0.49	0.50
Capital Costs ($current)	3.55	3.58	3.62	3.71	3.84	0.47	0.55	0.58	0.60
Nonresidential Structures	0.45	0.32	0.26	0.27	0.31	0.05	0.05	0.05	0.04
Machinery and Equipment	3.10	3.26	3.36	3.44	3.53	0.43	0.50	0.53	0.56
Capital Costs ($71)	1.46	1.45	1.44	1.44	1.46	0.17	0.20	0.21	0.21
Nonresidential Structures	0.14	0.10	0.08	0.08	0.08	0.01	0.01	0.01	0.01
Machinery and Equipment	1.32	1.35	1.36	1.36	1.37	0.16	0.18	0.19	0.20
ANNUAL CURRENT EXPENSES ($current)									
Total	0.81	1.63	2.40	3.20	4.06	4.24	4.49	4.68	4.94
Operating	0.34	0.70	1.09	1.51	1.95	2.06	2.20	2.34	2.51
Depreciation	0.48	0.93	1.32	1.70	2.11	2.18	2.29	2.33	2.43
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
2-Digit, Ontario	0.01	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.04

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.50	0.57	0.63	0.72	0.77	0.78	0.82	0.89
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.50	0.57	0.63	0.72	0.77	0.78	0.82	0.89
Capital Costs ($current)	0.62	0.73	0.84	0.98	1.09	1.14	1.23	1.37
Nonresidential Structures	0.04	0.05	0.05	0.06	0.07	0.08	0.08	0.09
Machinery and Equipment	0.58	0.68	0.78	0.92	1.01	1.06	1.15	1.29
Capital Costs ($71)	0.21	0.24	0.27	0.30	0.32	0.33	0.35	0.38
Nonresidential Structures	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Machinery and Equipment	0.20	0.23	0.26	0.29	0.31	0.32	0.33	0.36
ANNUAL CURRENT EXPENSES ($current)								
Total	5.25	5.50	5.82	6.25	6.66	7.21	7.64	8.20
Operating	2.70	2.90	3.12	3.38	3.68	4.02	4.38	4.79
Depreciation	2.56	2.61	2.70	2.86	2.98	3.20	3.26	3.41
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit,National	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
2-Digit, Ontario	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	26.58	26.55	26.28	26.26	26.63	1.40	1.25	1.29	0.94
Change 1987 Capital Stock	24.62	24.62	24.62	24.62	24.62	0.00	0.00	0.00	0.00
Change 1988 Stock	0.87	0.87	0.87	0.87	0.87	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.10	1.06	0.80	0.78	1.14	1.40	1.25	1.29	0.94
Capital Costs ($current)	28.05	28.82	29.39	30.36	31.57	1.70	1.58	1.67	1.27
Nonresidential Structures	5.02	5.81	6.45	6.83	7.78	0.46	0.45	0.49	0.38
Machinery and Equipment	23.04	23.02	22.94	23.53	23.78	1.24	1.13	1.18	0.90
Capital Costs ($71)	7.44	7.44	7.36	7.35	7.45	0.39	0.35	0.36	0.26
Nonresidential Structures	1.50	1.71	1.83	1.84	2.02	0.12	0.11	0.11	0.08
Machinery and Equipment	5.94	5.73	5.53	5.51	5.43	0.27	0.24	0.25	0.18
ANNUAL CURRENT EXPENSES ($current)									
Total	4.13	8.19	11.74	15.32	19.21	19.62	20.26	20.38	20.88
Operating	0.37	0.76	1.18	1.63	2.11	2.20	2.31	2.42	2.55
Depreciation	3.76	7.44	10.56	13.69	17.10	17.42	17.94	17.96	18.33
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.03	0.07	0.09	0.10	0.13	0.13	0.12	0.12	0.12
2-Digit, Ontario	0.10	0.20	0.25	0.30	0.36	0.36	0.36	0.35	0.33

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.99	1.17	1.14	1.04	0.57	0.94	1.48	1.48
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.99	1.17	1.14	1.04	0.57	0.94	1.48	1.48
Capital Costs ($current)	1.40	1.72	1.75	1.66	0.96	1.64	2.71	2.85
Nonresidential Structures	0.41	0.50	0.51	0.48	0.28	0.48	0.79	0.82
Machinery and Equipment	0.99	1.22	1.25	1.18	0.68	1.16	1.92	2.03
Capital Costs ($71)	0.28	0.33	0.32	0.29	0.16	0.26	0.41	0.41
Nonresidential Structures	0.09	0.10	0.10	0.09	0.05	0.08	0.12	0.12
Machinery and Equipment	0.19	0.23	0.22	0.20	0.11	0.18	0.29	0.30
ANNUAL CURRENT EXPENSES ($current)								
Total	21.55	21.63	21.93	22.60	22.79	23.71	23.72	24.26
Operating	2.68	2.83	2.98	3.14	3.31	3.52	3.75	3.99
Depreciation	18.87	18.80	18.96	19.46	19.48	20.19	19.97	20.27
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09
2-Digit, Ontario	0.33	0.31	0.30	0.30	0.28	0.27	0.26	0.25

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	22.50	22.60	22.78	22.82	22.84	3.62	3.12	3.63	3.53
Change 1987 Capital Stock	19.00	19.00	19.00	19.00	19.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.70	0.70	0.70	0.70	0.70	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.80	2.90	3.07	3.12	3.13	3.62	3.12	3.63	3.53
Capital Costs ($current)	24.10	25.04	26.12	27.11	27.98	4.58	4.09	4.91	4.97
Nonresidential Structures	2.76	2.90	3.17	3.40	3.52	0.58	0.51	0.60	0.59
Machinery and Equipment	21.34	22.14	22.95	23.71	24.46	4.00	3.58	4.31	4.38
Capital Costs ($71)	7.12	7.15	7.21	7.22	7.23	1.15	0.99	1.15	1.12
Nonresidential Structures	0.81	0.84	0.89	0.91	0.91	0.14	0.12	0.14	0.13
Machinery and Equipment	6.31	6.31	6.32	6.32	6.32	1.00	0.87	1.01	0.99
ANNUAL CURRENT EXPENSES ($current)									
Total	5.86	11.88	17.76	23.90	30.40	32.07	33.98	35.59	37.76
Operating	2.63	5.46	8.55	11.88	15.36	16.39	17.51	18.71	20.09
Depreciation	3.23	6.42	9.21	12.02	15.04	15.68	16.47	16.88	17.68
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.09	0.17	0.24	0.30	0.36	0.36	0.37	0.37	0.37
2-Digit, Ontario	0.17	0.33	0.45	0.56	0.68	0.69	0.70	0.70	0.70

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	3.58	3.59	3.75	4.21	4.26	4.45	4.40	4.77
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	3.58	3.59	3.75	4.21	4.26	4.45	4.40	4.77
Capital Costs ($current)	5.23	5.46	5.92	6.92	7.29	7.93	8.17	9.24
Nonresidential Structures	0.59	0.60	0.65	0.73	0.76	0.80	0.81	0.90
Machinery and Equipment	4.64	4.85	5.28	6.19	6.53	7.13	7.36	8.34
Capital Costs ($71)	1.13	1.14	1.19	1.33	1.35	1.41	1.39	1.51
Nonresidential Structures	0.12	0.12	0.12	0.13	0.13	0.13	0.12	0.13
Machinery and Equipment	1.01	1.02	1.07	1.20	1.22	1.28	1.27	1.38
ANNUAL CURRENT EXPENSES ($current)								
Total	40.27	42.23	44.59	47.74	50.70	54.79	57.80	61.80
Operating	21.61	23.18	24.89	26.90	29.08	31.63	34.28	37.22
Depreciation	18.66	19.05	19.70	20.85	21.62	23.16	23.52	24.58
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.37	0.36	0.36	0.36	0.36	0.37	0.36	0.36
2-Digit, Ontario	0.70	0.69	0.69	0.69	0.69	0.70	0.68	0.68

FOUNDRIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	35.81	34.79	32.89	34.31	36.03	5.66	4.19	4.31	5.77
Change 1987 Capital Stock	29.50	29.50	29.50	29.50	29.50	0.00	0.00	0.00	0.00
Change 1988 Stock	0.93	0.93	0.93	0.93	0.93	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.38	4.36	2.45	3.88	5.60	5.66	4.19	4.31	5.77
Capital Costs ($current)	37.82	38.09	37.52	40.80	44.32	7.20	5.55	5.92	8.35
Nonresidential Structures	6.93	8.27	7.81	8.42	9.31	1.65	1.28	1.33	1.85
Machinery and Equipment	30.89	29.82	29.71	32.38	35.01	5.55	4.27	4.59	6.50
Capital Costs ($71)	10.10	9.83	9.29	9.69	10.18	1.60	1.18	1.22	1.63
Nonresidential Structures	2.04	2.40	2.18	2.25	2.40	0.41	0.30	0.30	0.40
Machinery and Equipment	8.06	7.43	7.11	7.44	7.78	1.19	0.88	0.91	1.23
ANNUAL CURRENT EXPENSES ($current)									
Total	14.23	28.62	42.40	57.61	74.38	78.87	83.55	87.58	93.61
Operating	9.16	18.70	28.52	39.50	51.47	54.97	58.51	62.10	66.83
Depreciation	5.07	9.92	13.88	18.11	22.91	23.91	25.03	25.48	26.78
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.16	0.31	0.41	0.51	0.62	0.64	0.64	0.64	0.65
2-Digit, Ontario	0.29	0.58	0.74	0.92	1.13	1.14	1.15	1.15	1.15

FOUNDRIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.76	8.19	8.33	8.00	7.02	9.50	11.10	11.04
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.76	8.19	8.33	8.00	7.02	9.50	11.10	11.04
Capital Costs ($current)	10.27	13.04	13.93	14.06	12.97	18.55	22.85	24.00
Nonresidential Structures	2.30	2.96	3.12	3.19	2.91	4.10	4.99	5.09
Machinery and Equipment	7.98	10.08	10.81	10.88	10.07	14.45	17.86	18.91
Capital Costs ($71)	1.91	2.31	2.35	2.26	1.98	2.68	3.13	3.12
Nonresidential Structures	0.48	0.59	0.59	0.57	0.49	0.66	0.76	0.73
Machinery and Equipment	1.43	1.73	1.76	1.69	1.49	2.02	2.38	2.39
ANNUAL CURRENT EXPENSES ($current)								
Total	100.92	108.34	116.73	126.38	135.45	148.60	161.54	176.45
Operating	72.36	78.63	85.45	92.91	100.58	110.53	121.74	133.87
Depreciation	28.56	29.71	31.28	33.48	34.87	38.06	39.79	42.58
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.65	0.65	0.66	0.67	0.68	0.69	0.69	0.70
2-Digit, Ontario	1.16	1.15	1.16	1.19	1.20	1.21	1.22	1.24

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	56.11	54.74	52.19	54.10	56.41	7.58	5.61	5.77	7.74
Change 1987 Capital Stock	47.40	47.40	47.40	47.40	47.40	0.00	0.00	0.00	0.00
Change 1988 Stock	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	7.21	5.84	3.29	5.20	7.51	7.58	5.61	5.77	7.74
Capital Costs ($current)	59.26	59.93	59.54	64.33	69.30	9.65	7.44	7.94	11.19
Nonresidential Structures	10.86	13.01	12.40	13.27	14.50	2.21	1.72	1.79	2.48
Machinery and Equipment	48.40	46.92	47.14	51.06	54.80	7.43	5.73	6.16	8.71
Capital Costs ($71)	15.82	15.47	14.75	15.28	15.93	2.14	1.58	1.63	2.19
Nonresidential Structures	3.20	3.78	3.47	3.55	3.75	0.55	0.41	0.41	0.54
Machinery and Equipment	12.63	11.69	11.28	11.73	12.18	1.59	1.18	1.22	1.65
ANNUAL CURRENT EXPENSES ($current)									
Total	15.57	31.17	45.74	61.59	79.06	83.14	87.55	90.90	96.39
Operating	7.62	15.59	23.86	33.06	43.01	45.72	48.51	51.32	54.99
Depreciation	7.95	15.58	21.87	28.53	36.05	37.42	39.04	39.58	41.40
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.17	0.34	0.44	0.54	0.66	0.67	0.67	0.67	0.66
2-Digit, Ontario	0.32	0.64	0.79	0.98	1.20	1.20	1.21	1.19	1.18

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	9.06	10.98	11.17	10.73	9.41	12.74	14.88	14.80
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	9.06	10.98	11.17	10.73	9.41	12.74	14.88	14.80
Capital Costs ($current)	13.77	17.48	18.67	18.85	17.39	24.86	30.63	32.16
Nonresidential Structures	3.08	3.97	4.19	4.27	3.89	5.50	6.69	6.82
Machinery and Equipment	10.69	13.52	14.48	14.58	13.49	19.36	23.94	25.34
Capital Costs ($71)	2.56	3.10	3.16	3.03	2.66	3.60	4.20	4.18
Nonresidential Structures	0.64	0.79	0.79	0.77	0.66	0.88	1.02	0.98
Machinery and Equipment	1.92	2.31	2.36	2.26	1.99	2.71	3.18	3.20
ANNUAL CURRENT EXPENSES ($current)								
Total	103.17	109.44	116.74	125.49	133.23	145.27	155.93	168.85
Operating	59.28	64.09	69.30	75.02	80.93	88.53	97.03	106.22
Depreciation	43.89	45.35	47.44	50.47	52.30	56.74	58.90	62.63
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.67	0.66	0.66	0.67	0.67	0.67	0.67	0.67
2-Digit, Ontario	1.18	1.16	1.16	1.18	1.18	1.19	1.18	1.18

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	118.09	114.91	108.97	113.41	118.79	17.67	13.08	13.45	18.03
Change 1987 Capital Stock	98.19	98.19	98.19	98.19	98.19	0.00	0.00	0.00	0.00
Change 1988 Stock	3.11	3.11	3.11	3.11	3.11	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	16.79	13.61	7.67	12.11	17.49	17.67	13.08	13.45	18.03
Capital Costs ($current)	124.73	125.81	124.31	134.87	146.11	22.48	17.35	18.51	26.07
Nonresidential Structures	22.86	27.31	25.89	27.82	30.70	5.16	4.00	4.16	5.77
Machinery and Equipment	101.87	98.50	98.43	107.04	115.41	17.32	13.34	14.35	20.30
Capital Costs ($71)	33.31	32.47	30.79	32.04	33.55	4.99	3.69	3.80	5.09
Nonresidential Structures	6.73	7.93	7.24	7.44	7.90	1.28	0.95	0.95	1.26
Machinery and Equipment	26.58	24.54	23.55	24.60	25.65	3.71	2.74	2.85	3.84
ANNUAL CURRENT EXPENSES ($current)									
Total	35.67	71.45	104.98	141.71	182.29	192.48	203.27	211.88	225.55
Operating	18.94	38.70	59.10	81.87	106.62	113.66	120.85	128.11	137.65
Depreciation	16.73	32.76	45.88	59.84	75.67	78.81	82.42	83.77	87.89
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.40	0.78	1.00	1.24	1.53	1.55	1.56	1.55	1.55
2-Digit, Ontario	0.73	1.46	1.82	2.25	2.76	2.78	2.80	2.79	2.77

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	21.12	25.58	26.04	25.00	21.94	29.68	34.69	34.50
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	21.12	25.58	26.04	25.00	21.94	29.68	34.69	34.50
Capital Costs ($current)	32.09	40.75	43.51	43.94	40.52	57.94	71.39	74.96
Nonresidential Structures	7.18	9.25	9.76	9.96	9.08	12.81	15.59	15.90
Machinery and Equipment	24.92	31.50	33.76	33.98	31.45	45.13	55.80	59.07
Capital Costs ($71)	5.97	7.23	7.35	7.06	6.20	8.38	9.79	9.74
Nonresidential Structures	1.49	1.83	1.84	1.79	1.55	2.06	2.37	2.28
Machinery and Equipment	4.48	5.39	5.51	5.27	4.65	6.32	7.42	7.46
ANNUAL CURRENT EXPENSES ($current)								
Total	242.34	258.47	277.05	298.96	318.71	348.78	376.50	409.47
Operating	148.81	161.41	175.09	190.08	205.51	225.48	247.92	272.18
Depreciation	93.53	97.06	101.95	108.88	113.20	123.30	128.59	137.29
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.57	1.56	1.56	1.59	1.59	1.61	1.61	1.63
2-Digit, Ontario	2.78	2.75	2.75	2.81	2.82	2.85	2.85	2.87

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	41.06	39.76	39.60	38.83	38.26	6.44	6.73	6.56	6.96
Change 1987 Capital Stock	26.04	26.04	26.04	26.04	26.04	0.00	0.00	0.00	0.00
Change 1988 Stock	4.56	4.56	4.56	4.56	4.56	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	10.46	9.16	9.00	8.24	7.67	6.44	6.73	6.56	6.96
Capital Costs ($current)	44.99	45.86	47.84	49.30	50.30	8.82	9.69	9.87	11.12
Nonresidential Structures	4.52	5.14	5.41	4.84	6.90	1.30	1.10	0.90	0.80
Machinery and Equipment	40.47	40.71	42.43	44.45	43.40	7.52	8.58	8.97	10.32
Capital Costs ($71)	12.79	12.39	12.34	12.10	11.93	2.01	2.10	2.04	2.17
Nonresidential Structures	1.35	1.51	1.53	1.31	1.79	0.32	0.26	0.21	0.18
Machinery and Equipment	11.44	10.88	10.81	10.80	10.14	1.68	1.83	1.84	1.99
ANNUAL CURRENT EXPENSES ($current)									
Total	13.70	27.49	41.19	55.38	70.16	74.28	79.39	83.64	89.40
Operating	7.66	15.62	24.21	33.31	42.67	45.57	48.97	52.36	56.42
Depreciation	6.04	11.88	16.97	22.07	27.49	28.71	30.42	31.28	32.98
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.10	0.20	0.25	0.31	0.37	0.37	0.38	0.38	0.38
2-Digit, Ontario	0.12	0.25	0.30	0.37	0.44	0.44	0.45	0.46	0.46

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.16	5.04	6.21	6.24	5.60	4.80	4.58	4.65
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.16	5.04	6.21	6.24	5.60	4.80	4.58	4.65
Capital Costs ($current)	10.44	9.04	11.81	12.59	11.98	10.98	11.16	12.06
Nonresidential Structures	0.72	0.64	0.73	0.75	0.71	0.41	0.27	0.20
Machinery and Equipment	9.72	8.40	11.07	11.84	11.27	10.57	10.89	11.86
Capital Costs ($71)	1.92	1.57	1.94	1.95	1.75	1.50	1.43	1.45
Nonresidential Structures	0.15	0.13	0.14	0.14	0.12	0.07	0.04	0.03
Machinery and Equipment	1.77	1.44	1.80	1.81	1.63	1.43	1.39	1.42
ANNUAL CURRENT EXPENSES ($current)								
Total	95.56	100.19	106.19	113.55	120.28	128.75	135.14	143.16
Operating	60.65	64.71	69.40	74.65	80.15	86.22	92.40	99.07
Depreciation	34.90	35.48	36.78	38.89	40.13	42.53	42.74	44.09
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.38	0.37	0.37	0.37	0.37	0.37	0.36	0.35
2-Digit, Ontario	0.46	0.45	0.44	0.45	0.45	0.44	0.43	0.42

PETROLEUM REFINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	55.96	54.31	54.80	53.98	52.84	1.69	0.39	2.28	2.57
Change 1987 Capital Stock	49.76	49.76	49.76	49.76	49.76	0.00	0.00	0.00	0.00
Change 1988 Stock	1.13	1.13	1.13	1.13	1.13	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.07	3.42	3.91	3.09	1.95	1.69	0.39	2.28	2.57
Capital Costs ($current)	61.61	62.39	65.17	67.54	69.11	2.30	0.56	3.44	4.11
Nonresidential Structures	47.83	45.05	49.20	50.90	51.47	1.73	0.43	2.47	2.80
Machinery and Equipment	13.78	17.34	15.98	16.64	17.65	0.57	0.13	0.97	1.31
Capital Costs ($71)	17.98	17.54	17.68	17.41	17.04	0.54	0.13	0.74	0.83
Nonresidential Structures	14.65	13.56	14.19	13.95	13.51	0.44	0.10	0.57	0.61
Machinery and Equipment	3.33	3.97	3.49	3.46	3.53	0.11	0.02	0.17	0.22
ANNUAL CURRENT EXPENSES ($current)									
Total	18.86	37.83	56.83	76.62	97.19	100.14	103.54	106.51	111.11
Operating	10.59	21.62	33.67	46.48	59.59	62.01	64.60	67.55	71.18
Depreciation	8.27	16.21	23.15	30.14	37.60	38.13	38.94	38.96	39.92
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.77	1.57	2.24	2.92	3.67	3.75	3.84	3.89	3.97
2-Digit, Ontario	1.77	3.59	5.04	6.51	8.09	8.20	8.35	8.45	8.55

PETROLEUM REFINING
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.55	1.10	3.65	5.80	5.10	6.79	8.77	9.70
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.55	1.10	3.65	5.80	5.10	6.79	8.77	9.70
Capital Costs ($current)	0.94	1.99	7.06	11.98	11.23	16.03	22.11	25.98
Nonresidential Structures	0.60	1.18	3.95	6.24	5.48	7.30	9.50	11.01
Machinery and Equipment	0.35	0.82	3.11	5.74	5.75	8.73	12.61	14.98
Capital Costs ($71)	0.18	0.35	1.18	1.88	1.66	2.20	2.85	3.15
Nonresidential Structures	0.12	0.23	0.74	1.11	0.92	1.16	1.42	1.56
Machinery and Equipment	0.05	0.12	0.44	0.77	0.73	1.04	1.42	1.59
ANNUAL CURRENT EXPENSES ($current)								
Total	115.46	118.71	124.01	131.91	139.09	149.80	159.73	172.32
Operating	74.62	78.22	82.80	88.59	94.65	102.22	110.77	120.35
Depreciation	40.83	40.49	41.21	43.31	44.44	47.58	48.96	51.97
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	4.04	4.05	4.12	4.28	4.38	4.55	4.64	4.80
2-Digit, Ontario	8.64	8.62	8.72	9.02	9.19	9.48	9.62	9.88

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	3.58	3.45	3.49	3.43	3.34	0.13	0.03	0.17	0.20
Change 1987 Capital Stock	3.12	3.12	3.12	3.12	3.12	0.00	0.00	0.00	0.00
Change 1988 Stock	0.07	0.07	0.07	0.07	0.07	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.39	0.26	0.30	0.24	0.15	0.13	0.03	0.17	0.20
Capital Costs ($current)	3.94	3.97	4.15	4.29	4.37	0.18	0.04	0.26	0.31
Nonresidential Structures	3.06	2.86	3.13	3.23	3.25	0.13	0.03	0.19	0.21
Machinery and Equipment	0.88	1.10	1.02	1.06	1.12	0.04	0.01	0.07	0.10
Capital Costs ($71)	1.15	1.11	1.13	1.11	1.08	0.04	0.01	0.06	0.06
Nonresidential Structures	0.94	0.86	0.90	0.89	0.85	0.03	0.01	0.04	0.05
Machinery and Equipment	0.21	0.25	0.22	0.22	0.22	0.01	0.00	0.01	0.02
ANNUAL CURRENT EXPENSES ($current)									
Total	1.31	2.61	3.94	5.31	6.74	6.96	7.20	7.43	7.77
Operating	0.78	1.58	2.46	3.40	4.35	4.53	4.72	4.94	5.22
Depreciation	0.53	1.03	1.48	1.92	2.39	2.43	2.48	2.49	2.55
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.05	0.11	0.15	0.20	0.25	0.26	0.27	0.27	0.28
2-Digit, Ontario	0.12	0.25	0.35	0.45	0.56	0.57	0.58	0.59	0.60

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.04	0.08	0.28	0.44	0.39	0.52	0.67	0.74
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.04	0.08	0.28	0.44	0.39	0.52	0.67	0.74
Capital Costs ($current)	0.07	0.15	0.54	0.92	0.86	1.23	1.69	1.99
Nonresidential Structures	0.05	0.09	0.30	0.48	0.42	0.56	0.73	0.84
Machinery and Equipment	0.03	0.06	0.24	0.44	0.44	0.67	0.96	1.14
Capital Costs ($71)	0.01	0.03	0.09	0.14	0.13	0.17	0.22	0.24
Nonresidential Structures	0.01	0.02	0.06	0.09	0.07	0.09	0.11	0.12
Machinery and Equipment	0.00	0.01	0.03	0.06	0.06	0.08	0.11	0.12
ANNUAL CURRENT EXPENSES ($current)								
Total	8.09	8.34	8.74	9.35	9.91	10.73	11.52	12.52
Operating	5.47	5.74	6.09	6.54	7.01	7.61	8.28	9.05
Depreciation	2.61	2.59	2.65	2.80	2.89	3.12	3.24	3.47
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.28	0.28	0.29	0.30	0.31	0.33	0.33	0.35
2-Digit, Ontario	0.61	0.61	0.61	0.64	0.65	0.68	0.69	0.72

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	221.28	225.89	226.02	229.18	231.03	24.26	16.42	9.12	3.16
Change 1987 Capital Stock	202.72	202.72	202.72	202.72	202.72	0.00	0.00	0.00	0.00
Change 1988 Stock	3.63	3.63	3.63	3.63	3.63	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	14.93	19.54	19.67	22.82	24.67	24.26	16.42	9.12	3.16
Capital Costs ($current)	237.05	249.27	257.64	270.73	280.39	30.29	21.17	12.09	4.36
Nonresidential Structures	47.41	51.20	54.03	53.24	52.03	5.48	3.98	2.40	0.92
Machinery and Equipment	189.63	198.07	203.61	217.50	228.36	24.81	17.19	9.69	3.44
Capital Costs ($71)	65.64	67.06	67.08	67.98	68.49	7.19	4.87	2.70	0.94
Nonresidential Structures	14.20	15.11	15.33	14.41	13.55	1.37	0.95	0.55	0.20
Machinery and Equipment	51.44	51.95	51.75	53.57	54.95	5.82	3.91	2.15	0.73
ANNUAL CURRENT EXPENSES ($current)									
Total	59.61	121.78	182.23	246.26	314.37	328.23	343.35	351.47	362.94
Operating	27.81	58.20	91.18	127.14	164.94	174.23	183.82	192.11	201.10
Depreciation	31.80	63.58	91.05	119.12	149.44	153.99	159.53	159.36	161.84
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.80	1.57	2.13	2.67	3.22	3.14	3.98	2.99	2.90
2-Digit, Ontario	1.37	2.68	3.64	4.56	5.51	5.40	5.30	5.16	5.01

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	2.21	7.26	8.03	16.78	-9.76	-6.93	6.21	21.16
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.21	7.26	8.03	16.78	-9.76	-6.93	6.21	21.16
Capital Costs ($current)	3.16	10.83	12.45	27.15	-16.47	-12.26	11.53	41.15
Nonresidential Structures	0.72	2.62	3.06	6.77	-4.31	-3.45	3.48	11.91
Machinery and Equipment	2.44	8.21	9.39	20.38	-12.16	-8.81	8.05	29.24
Capital Costs ($71)	0.65	2.15	2.38	4.97	-2.89	-2.05	1.84	6.28
Nonresidential Structures	0.15	0.52	0.58	1.22	-0.73	-0.55	0.53	1.70
Machinery and Equipment	0.50	1.63	1.80	3.75	-2.16	-1.50	1.31	4.58
ANNUAL CURRENT EXPENSES ($current)								
Total	376.25	385.81	398.31	418.94	426.35	442.05	454.68	479.87
Operating	210.81	221.43	232.94	247.67	257.93	270.75	286.57	307.20
Depreciation	165.44	164.37	165.37	171.28	168.42	171.30	168.11	172.67
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	2.80	2.69	2.60	2.58	2.47	2.40	2.30	2.28
2-Digit, Ontario	4.86	4.68	4.53	4.50	4.32	4.20	4.05	4.02

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	21.46	21.45	21.40	21.39	21.44	0.60	0.66	0.68	0.68
Change 1987 Capital Stock	20.76	20.76	20.76	20.76	20.76	0.00	0.00	0.00	0.00
Change 1988 Stock	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.56	0.55	0.50	0.49	0.53	0.60	0.66	0.68	0.68
Capital Costs ($current)	21.74	22.00	22.37	22.95	23.56	0.68	0.77	0.80	0.82
Nonresidential Structures	2.77	1.99	1.60	1.68	1.88	0.07	0.07	0.06	0.06
Machinery and Equipment	18.97	20.01	20.77	21.27	21.67	0.61	0.70	0.74	0.76
Capital Costs ($71)	8.96	8.93	8.90	8.91	8.94	0.25	0.28	0.29	0.28
Nonresidential Structures	0.87	0.62	0.48	0.47	0.51	0.02	0.02	0.02	0.01
Machinery and Equipment	8.10	8.31	8.43	8.43	8.43	0.23	0.26	0.27	0.27
ANNUAL CURRENT EXPENSES ($current)									
Total	5.72	11.52	17.14	23.00	29.19	30.01	31.15	31.87	33.07
Operating	2.80	5.80	9.05	12.54	16.20	16.85	17.63	18.40	19.33
Depreciation	2.92	5.72	8.09	10.46	12.99	13.16	13.51	13.47	13.74
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.06	0.11	0.15	0.20	0.23	0.23	0.22	0.22	0.21
2-Digit, Ontario	0.15	0.28	0.39	0.50	0.60	0.58	0.57	0.55	0.53

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.68	0.76	0.84	0.94	1.00	1.02	1.06	1.14
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.68	0.76	0.84	0.94	1.00	1.02	1.06	1.14
Capital Costs ($current)	0.85	0.98	1.11	1.28	1.41	1.48	1.59	1.76
Nonresidential Structures	0.06	0.06	0.07	0.08	0.10	0.11	0.10	0.11
Machinery and Equipment	0.79	0.91	1.03	1.20	1.31	1.38	1.48	1.65
Capital Costs ($71)	0.28	0.32	0.35	0.39	0.42	0.43	0.45	0.48
Nonresidential Structures	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Machinery and Equipment	0.27	0.31	0.34	0.38	0.40	0.41	0.43	0.47
ANNUAL CURRENT EXPENSES ($current)								
Total	34.46	35.42	36.64	38.31	39.82	42.02	43.49	45.49
Operating	20.35	21.39	22.52	23.82	25.22	26.87	28.55	30.37
Depreciation	14.11	14.03	14.12	14.50	14.59	15.16	14.94	15.12
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit,National	0.21	0.20	0.19	0.19	0.18	0.18	0.17	0.17
2-Digit, Ontario	0.52	0.50	0.49	0.48	0.46	0.45	0.43	0.42

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SENES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	72.05	71.40	65.07	72.88	76.96	8.82	9.28	14.39	11.68
Change 1987 Capital Stock	65.54	65.54	65.54	65.54	65.54	0.00	0.00	0.00	0.00
Change 1988 Stock	1.72	1.72	1.72	1.72	1.72	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	4.79	4.14	-2.19	5.62	9.70	8.82	9.28	14.39	11.68
Capital Costs ($current)	78.60	81.82	77.92	91.57	100.50	11.98	13.20	21.25	18.19
Nonresidential Structures	7.18	7.16	7.24	7.11	7.55	0.90	1.01	1.70	1.51
Machinery and Equipment	71.41	74.66	70.68	84.45	92.95	11.08	12.18	19.55	16.68
Capital Costs ($71)	20.39	20.23	18.44	20.64	21.80	2.50	2.63	4.08	3.31
Nonresidential Structures	2.12	2.08	2.03	1.91	1.95	0.22	0.24	0.39	0.33
Machinery and Equipment	18.27	18.14	16.41	18.74	19.85	2.27	2.39	3.69	2.98
ANNUAL CURRENT EXPENSES ($current)									
Total	25.79	52.41	76.72	105.48	137.46	144.44	153.21	162.77	173.66
Operating	15.25	31.43	47.55	66.75	87.80	93.04	99.23	106.84	114.88
Depreciation	10.54	20.97	29.17	38.73	49.66	51.40	53.97	55.93	58.78
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.65	1.30	1.66	2.08	2.57	2.57	2.58	2.60	2.59
2-Digit, Ontario	1.21	2.45	3.13	3.92	4.83	4.85	4.87	4.91	4.88

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SENES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	8.59	11.05	12.25	10.28	11.82	14.85	12.75	17.15
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	8.59	11.05	12.25	10.28	11.82	14.85	12.75	17.15
Capital Costs ($current)	14.13	19.18	22.40	19.87	24.09	32.05	29.11	41.44
Nonresidential Structures	1.15	1.48	1.68	1.47	1.85	2.43	2.17	3.08
Machinery and Equipment	12.99	17.69	20.72	18.40	22.23	29.62	26.94	38.36
Capital Costs ($71)	2.43	3.13	3.47	2.91	3.35	4.21	3.61	4.86
Nonresidential Structures	0.24	0.29	0.32	0.26	0.32	0.39	0.33	0.44
Machinery and Equipment	2.20	2.84	3.15	2.65	3.04	3.82	3.28	4.42
ANNUAL CURRENT EXPENSES ($current)								
Total	184.42	194.68	207.07	220.90	235.25	255.82	271.79	294.13
Operating	122.76	131.61	141.52	151.91	163.72	178.47	193.01	210.55
Depreciation	61.66	63.07	65.55	68.99	71.54	77.36	78.79	83.58
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	2.56	2.50	2.47	2.48	2.47	2.48	2.42	2.42
2-Digit, Ontario	4.83	4.70	4.61	4.57	4.51	4.52	4.40	4.37

POWER GENERATION
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	25.19	25.18	25.14	25.21	25.29	2.13	2.33	2.38	2.56
Change 1987 Capital Stock	22.54	22.54	22.54	22.54	22.54	0.00	0.00	0.00	0.00
Change 1988 Stock	0.70	0.70	0.70	0.70	0.70	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.95	1.94	1.89	1.97	2.04	2.13	2.33	2.38	2.56
Capital Costs ($current)	27.05	27.76	28.75	30.03	31.15	2.72	3.10	3.27	3.71
Nonresidential Structures	13.32	12.92	12.98	13.35	13.65	1.20	1.35	1.41	1.55
Machinery and Equipment	13.73	14.84	15.77	16.68	17.50	1.52	1.75	1.87	2.15
Capital Costs ($71)	7.74	7.73	7.71	7.74	7.76	0.65	0.72	0.73	0.79
Nonresidential Structures	3.59	3.45	3.34	3.29	3.24	0.27	0.30	0.29	0.31
Machinery and Equipment	4.15	4.28	4.37	4.45	4.53	0.38	0.42	0.44	0.48
ANNUAL CURRENT EXPENSES ($current)									
Total	4.36	8.68	12.59	16.62	20.94	21.59	22.56	23.03	24.01
Operating	0.73	1.52	2.36	3.28	4.24	4.46	4.72	4.99	5.31
Depreciation	3.63	7.17	10.23	13.34	16.70	17.13	17.84	18.04	18.71
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.02	0.05	0.07	0.08	0.10	0.10	0.10	0.10	0.09
2-Digit, Ontario	0.08	0.15	0.22	0.28	0.34	0.34	0.34	0.33	0.32

POWER GENERATION
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	2.56	2.68	2.86	2.94	3.16	3.27	3.53	3.92
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.56	2.68	2.86	2.94	3.16	3.27	3.53	3.92
Capital Costs ($current)	3.91	4.31	4.83	5.23	5.92	6.50	7.42	8.71
Nonresidential Structures	1.61	1.78	1.99	2.14	2.42	2.65	3.00	3.48
Machinery and Equipment	2.29	2.52	2.83	3.09	3.49	3.84	4.42	5.22
Capital Costs ($71)	0.79	0.82	0.88	0.90	0.97	1.00	1.08	1.20
Nonresidential Structures	0.31	0.32	0.35	0.35	0.38	0.39	0.42	0.46
Machinery and Equipment	0.48	0.50	0.53	0.55	0.59	0.61	0.67	0.74
ANNUAL CURRENT EXPENSES ($current)								
Total	25.21	25.81	26.72	28.13	29.23	31.18	32.07	33.74
Operating	5.66	6.02	6.42	6.87	7.37	7.95	8.56	9.25
Depreciation	19.55	19.79	20.30	21.26	21.86	23.23	23.50	24.49
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.09	0.09	0.08	0.08	0.08	0.08	0.07	0.07
2-Digit, Ontario	0.32	0.30	0.29	0.29	0.28	0.28	0.26	0.25

WASTE DISPOSAL, HOSPITAL COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	31.45	31.47	31.43	31.34	31.36	2.63	2.65	2.70	2.72
Change 1987 Capital Stock	27.92	27.92	27.92	27.92	27.92	0.00	0.00	0.00	0.00
Change 1988 Stock	0.83	0.83	0.83	0.83	0.83	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.70	2.72	2.69	2.59	2.62	2.63	2.65	2.70	2.72
Capital Costs ($current)	34.32	35.15	36.66	38.40	40.09	3.50	3.71	3.93	4.16
ANNUAL CURRENT EXPENSES ($current)									
Operating	2.90	6.01	9.38	12.99	16.77	17.64	18.65	19.66	20.87

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	2.84	2.91	2.96	3.00	3.04	3.07	3.16	3.27
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.84	2.91	2.96	3.00	3.04	3.07	3.16	3.27
Capital Costs ($current)	4.55	4.90	5.23	5.59	5.97	6.41	6.97	7.65
ANNUAL CURRENT EXPENSES ($current)								
Operating	22.20	23.58	25.06	26.72	28.53	30.62	32.79	35.15

WASTE DISPOSAL, MUNICIPAL COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	25.53	25.58	25.64	25.71	25.88	3.15	3.23	3.31	3.36
Change 1987 Capital Stock	22.02	22.02	22.02	22.02	22.02	0.00	0.00	0.00	0.00
Change 1988 Stock	0.78	0.78	0.78	0.78	0.78	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.72	2.77	2.83	2.90	3.07	3.15	3.23	3.31	3.36
Capital Costs ($current)	28.03	28.83	29.77	30.86	31.96	4.01	4.25	4.49	4.74
ANNUAL CURRENT EXPENSES ($current)									
Operating	1.24	2.57	4.01	5.57	7.21	7.64	8.14	8.65	9.25

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	3.24	3.29	3.34	3.37	3.39	3.43	3.48	3.54
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	3.24	3.29	3.34	3.37	3.39	3.43	3.48	3.54
Capital Costs ($current)	4.76	5.02	5.29	5.58	5.86	6.23	6.62	7.05
ANNUAL CURRENT EXPENSES ($current)								
Operating	9.90	10.57	11.30	12.11	12.99	14.02	15.08	16.22

PROVINCIAL GOVERNMENT OPERATING EXPENSES AND TAXES
(in millions of dollars)

ONE STUDY, SCEN-A, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Total Expenditures, $86	16.90	16.91	16.92	16.93	16.94	0.61	0.62	0.63	0.65
Total Expenditures, $C	19.09	19.78	20.59	21.44	22.16	0.82	0.87	0.92	0.98
Total Expenditures, $71	5.33	5.33	5.34	5.34	5.34	0.19	0.20	0.20	0.20
of which:									
Labour	3.29	3.28	3.26	3.25	3.25	0.12	0.12	0.12	0.12
Goods and Services	2.04	2.05	2.07	2.09	2.09	0.07	0.08	0.08	0.08
Provincial Personal Tax Increa for Ministry and Hospitals	26.59	34.87	42.96	51.40	60.23	40.32	42.25	43.55	45.59

ONE STUDY, SCEN-A, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Total Expenditures, $86	0.66	18.65	18.70	18.75	18.80	18.84	2.55	2.60
Total Expenditures, $C	1.05	31.04	32.51	34.18	35.98	38.08	5.42	5.82
Total Expenditures, $71	0.21	5.88	5.90	5.91	5.93	5.94	0.80	0.82
of which:								
Labour	0.13	3.61	3.64	3.66	3.67	3.68	0.50	0.51
Goods and Services	0.08	2.27	2.26	2.26	2.26	2.27	0.31	0.31
Provincial Personal Tax Increa for Ministry and Hospitals	48.01	79.61	83.11	87.52	91.71	97.41	66.99	70.60

DIRECT ADDITIONS TO EMPLOYMENT FROM OPERATING EXPENSES
(in thousands)

ONE STUDY, SCEN-A, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.02	0.05	0.07	0.09	0.11	0.11	0.11	0.11	0.11
Food, Manufacturing	0.08	0.16	0.24	0.31	0.38	0.38	0.38	0.38	0.38
Food, Hospitality	0.01	0.02	0.04	0.05	0.06	0.06	0.06	0.07	0.07
Pulp & Paper, Manufacturing	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Pulp & Paper, Printing	0.02	0.04	0.06	0.08	0.09	0.10	0.10	0.10	0.10
Foundries, Non-ferrous, Steel	0.56	1.08	1.56	2.05	2.53	2.55	2.57	2.59	2.64
Automotive Industry	0.07	0.14	0.20	0.26	0.32	0.32	0.33	0.33	0.34
Petroleum Refining & Asphalt	0.12	0.23	0.34	0.44	0.54	0.53	0.52	0.52	0.52
Petrochemicals, Manufaturing	0.32	0.64	0.94	1.24	1.52	1.53	1.52	1.52	1.51
Petrochemicals, Dry Cleaning	0.07	0.13	0.20	0.27	0.33	0.33	0.33	0.33	0.34
Non-Metallic Minerals	0.30	0.59	0.84	1.11	1.39	1.40	1.41	1.45	1.48
Electric Power	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Hospitals	0.06	0.12	0.19	0.25	0.31	0.31	0.32	0.32	0.33
Waste Disposal	0.02	0.05	0.07	0.09	0.11	0.11	0.11	0.11	0.11
Provincial Ministry	0.22	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01
Total, All Sectors	1.89	3.50	4.99	6.51	7.98	7.81	7.84	7.90	8.01

ONE STUDY, SCEN-A, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Open Pit Mines	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12
Food, Manufacturing	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39
Food, Hospitality	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09
Pulp & Paper, Manufacturing	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Pulp & Paper, Printing	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11
Foundries, Non-ferrous, Steel	2.71	2.77	2.84	2.91	2.96	3.04	3.13	3.21
Automotive Industry	0.35	0.35	0.36	0.36	0.37	0.37	0.37	0.37
Petroleum Refining & Asphalt	0.52	0.51	0.52	0.52	0.52	0.53	0.54	0.55
Petrochemicals, Manufaturing	1.50	1.49	1.48	1.48	1.45	1.43	1.41	1.42
Petrochemicals, Dry Cleaning	0.34	0.34	0.34	0.35	0.35	0.35	0.35	0.35
Non-Metallic Minerals	1.49	1.51	1.54	1.56	1.58	1.61	1.63	1.67
Electric Power	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
Hospitals	0.33	0.34	0.34	0.35	0.35	0.36	0.36	0.36
Waste Disposal	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Provincial Ministry	0.01	0.24	0.24	0.24	0.24	0.24	0.03	0.03
Total, All Sectors	8.09	8.40	8.51	8.62	8.68	8.79	8.70	8.85

OPERATING EXPENSES AS SHARE OF GDP IN SENES TARGETED INDUSTRIES
(in per cent)

OME STUDY, SCEN-A, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.69	1.28	2.02	2.60	3.18	3.12	3.09	3.16	3.33
Food, Manufacturing	1.00	1.99	2.77	3.54	4.37	4.40	4.43	4.39	4.39
Food, Hospitality	3.14	6.00	8.25	10.33	12.14	11.77	11.51	11.09	10.84
Pulp & Paper, Manufacturing	0.27	0.54	0.67	0.80	0.97	0.97	0.96	0.92	0.89
Pulp & Paper, Printing	0.21	0.42	0.57	0.72	0.88	0.89	0.90	0.90	0.90
Foundries	1.07	2.13	2.75	3.43	4.23	4.30	4.35	4.35	4.37
Non-ferrous Smelters	2.15	4.25	5.44	6.72	8.25	8.32	8.36	8.28	8.26
Iron & Steel Industry	0.91	1.81	2.32	2.87	3.54	3.58	3.61	3.59	3.59
Automotive Industry	0.25	0.50	0.63	0.77	0.92	0.93	0.95	0.95	0.95
Petroleum Refining	8.47	17.14	24.42	31.89	40.08	40.99	41.97	42.55	43.36
Asphalt	1.03	2.08	2.97	3.89	4.88	5.00	5.13	5.21	5.33
Petrochemicals, Manufaturing	2.36	4.61	6.27	7.86	9.47	9.25	9.06	8.80	8.52
Petrochemicals, Dry Cleaning	1.81	3.47	4.85	6.18	7.42	7.24	7.09	6.83	6.66
Non-Metallic Minerals	2.26	4.53	5.80	7.27	8.96	8.96	9.01	9.06	9.04
Electric Power	1.08	2.07	2.95	3.71	4.49	4.45	4.43	4.27	4.17

OME STUDY, SCEN-A, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Open Pit Mines	3.47	3.53	3.63	3.71	3.85	4.07	4.19	4.43
Food, Manufacturing	4.38	4.31	4.27	4.28	4.24	4.26	4.18	4.14
Food, Hospitality	10.66	10.33	10.10	10.02	9.86	9.85	9.63	9.54
Pulp & Paper, Manufacturing	0.87	0.83	0.80	0.79	0.76	0.73	0.68	0.66
Pulp & Paper, Printing	0.90	0.89	0.88	0.89	0.89	0.89	0.88	0.87
Foundries	4.42	4.42	4.45	4.55	4.58	4.65	4.69	4.74
Non-ferrous Smelters	8.29	8.19	8.17	8.29	8.27	8.34	8.30	8.33
Iron & Steel Industry	3.62	3.59	3.61	3.67	3.68	3.72	3.73	3.76
Automotive Industry	0.95	0.94	0.92	0.93	0.93	0.92	0.89	0.87
Petroleum Refining	44.10	44.23	45.03	46.78	47.89	49.69	50.69	52.44
Asphalt	5.43	5.46	5.58	5.82	5.99	6.25	6.42	6.69
Petrochemicals, Manufaturing	8.24	7.92	7.66	7.58	7.27	7.05	6.78	6.72
Petrochemicals, Dry Cleaning	6.51	6.28	6.11	5.98	5.79	5.65	5.43	5.28
Non-Metallic Minerals	8.92	8.72	8.63	8.65	8.62	8.64	8.43	8.43
Electric Power	4.06	3.86	3.70	3.62	3.49	3.44	3.25	3.15

TOTAL, ALL INDUSTRIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	1301.36	1282.83	1264.96	1274.00	1282.63	163.75	149.91	149.65	154.16
Change 1987 Capital Stock	1031.99	1031.99	1031.99	1031.99	1031.99	0.00	0.00	0.00	0.00
Change 1988 Stock	72.35	72.35	72.35	72.35	72.35	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	197.02	178.49	160.62	169.66	178.28	163.75	149.91	149.65	154.16
Capital Costs ($current)	1406.81	1443.15	1401.36	1557.88	1621.11	216.02	208.00	216.85	236.33
Capital Costs ($71)	395.91	390.54	385.45	387.69	389.96	49.55	45.57	45.46	46.81
ANNUAL CURRENT EXPENSES ($current)									
Total	309.35	603.05	880.11	1174.44	1490.52	1536.76	1617.36	1674.81	1762.07
Operating	118.47	244.15	377.23	523.92	679.75	718.80	760.79	803.55	854.42
Depreciation	171.80	339.12	482.29	629.09	788.61	817.13	855.70	870.34	906.67
Ministry Expenditures	19.08	19.78	20.59	21.44	22.16	0.82	0.87	0.92	0.98
Current Expenses as % of Ontario GDP	0.14	0.26	0.35	0.44	0.52	0.51	0.50	0.49	0.49

ONE STUDY, SCEN-B, 08/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	143.97	148.24	168.37	176.65	138.51	151.79	172.47	195.22
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	143.97	148.24	168.37	176.65	138.51	151.79	172.47	195.22
Capital Costs ($current)	231.80	248.29	298.95	329.42	279.11	320.63	378.99	448.92
Capital Costs ($71)	43.57	44.55	50.80	53.41	42.07	45.69	51.74	58.51
ANNUAL CURRENT EXPENSES ($current)								
Total	1860.84	1964.38	2062.41	2192.76	2294.99	2455.16	2537.53	2703.09
Operating	909.57	969.73	1036.41	1112.67	1188.23	1282.49	1386.07	1504.08
Depreciation	950.22	963.61	993.49	1045.91	1070.79	1134.59	1146.05	1193.19
Ministry Expenditures	1.05	31.04	32.51	34.18	35.98	38.08	5.42	5.82
Current Expenses as % of Ontario GDP	0.48	0.47	0.46	0.46	0.45	0.44	0.42	0.41

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	0.24	0.24	0.23	0.23	0.23	0.02	0.02	0.02	0.02
Change 1987 Capital Stock	0.21	0.21	0.21	0.21	0.21	0.00	0.00	0.00	0.00
Change 1988 Stock	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Capital Costs ($current)	0.27	0.27	0.27	0.29	0.30	0.03	0.03	0.03	0.03
Nonresidential Structures	0.20	0.21	0.22	0.22	0.23	0.03	0.02	0.02	0.02
Machinery and Equipment	0.07	0.05	0.06	0.07	0.07	0.01	0.01	0.01	0.01
Capital Costs ($71)	0.08	0.08	0.08	0.08	0.08	0.01	0.01	0.01	0.01
Nonresidential Structures	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.00	0.00
Machinery and Equipment	0.02	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)									
Total	1.40	2.86	4.42	6.07	7.83	8.26	8.75	9.20	9.75
Operating	1.36	2.79	4.32	5.94	7.67	8.09	8.57	9.03	9.57
Depreciation	0.04	0.07	0.10	0.13	0.16	0.17	0.17	0.17	0.18
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.03	0.05	0.08	0.10	0.13	0.12	0.12	0.12	0.13
2-Digit, Ontario	2.78	5.39	7.69	10.00	12.10	11.82	11.64	11.96	12.26

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-8, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.03
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.03
Capital Costs ($current)	0.04	0.04	0.02	0.04	0.05	0.07	0.07	0.08
Nonresidential Structures	0.03	0.03	0.02	0.03	0.04	0.05	0.06	0.06
Machinery and Equipment	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.02
Capital Costs ($71)	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Nonresidential Structures	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)								
Total	10.40	11.03	11.63	12.39	13.27	14.34	15.44	16.64
Operating	10.22	10.84	11.44	12.19	13.06	14.12	15.22	16.41
Depreciation	0.19	0.19	0.19	0.20	0.21	0.22	0.22	0.23
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.14	0.14	0.14	0.15	0.15	0.16	0.17	0.17
2-Digit, Ontario	12.68	12.89	13.15	13.65	14.35	14.98	15.61	16.35

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	25.90	25.67	25.87	25.62	25.72	1.75	1.37	1.63	1.71
Change 1987 Capital Stock	22.86	22.86	22.86	22.86	22.86	0.00	0.00	0.00	0.00
Change 1988 Stock	0.72	0.72	0.72	0.72	0.72	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.31	2.09	2.29	2.04	2.14	1.75	1.37	1.63	1.71
Capital Costs ($current)	28.37	29.54	31.18	32.36	33.74	2.39	1.95	2.42	2.68
Nonresidential Structures	4.40	4.40	5.24	5.56	6.28	0.44	0.38	0.50	0.62
Machinery and Equipment	23.97	25.14	25.94	26.81	27.46	1.95	1.58	1.91	2.06
Capital Costs ($71)	8.17	8.11	8.17	8.09	8.13	0.55	0.43	0.51	0.54
Nonresidential Structures	1.30	1.28	1.47	1.49	1.62	0.11	0.09	0.12	0.14
Machinery and Equipment	6.87	6.82	6.70	6.60	6.50	0.44	0.34	0.40	0.41
ANNUAL CURRENT EXPENSES ($current)									
Total	8.80	17.86	26.98	36.52	46.64	48.43	50.56	52.23	54.69
Operating	4.99	10.29	16.08	22.26	28.73	30.12	31.66	33.23	35.14
Depreciation	3.81	7.57	10.90	14.26	17.91	18.31	18.90	19.00	19.55
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.06	0.13	0.18	0.23	0.28	0.28	0.29	0.28	0.28
2-Digit, Ontario	0.15	0.29	0.40	0.51	0.63	0.64	0.64	0.64	0.64

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	1.68	2.14	2.24	1.95	2.14	2.48	2.28	2.27
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.68	2.14	2.24	1.95	2.14	2.48	2.28	2.27
Capital Costs ($current)	2.76	3.73	4.12	3.79	4.39	5.42	5.29	5.59
Nonresidential Structures	0.70	0.96	1.05	0.96	1.10	1.31	1.23	1.33
Machinery and Equipment	2.07	2.77	3.07	2.83	3.29	4.11	4.06	4.26
Capital Costs ($71)	0.53	0.68	0.71	0.62	0.68	0.79	0.72	0.72
Nonresidential Structures	0.15	0.19	0.20	0.17	0.19	0.21	0.19	0.19
Machinery and Equipment	0.38	0.49	0.51	0.44	0.49	0.57	0.54	0.53
ANNUAL CURRENT EXPENSES ($current)								
Total	57.50	59.90	62.77	66.21	69.54	74.29	77.83	82.24
Operating	37.23	39.47	41.91	44.56	47.48	50.98	54.51	58.30
Depreciation	20.27	20.43	20.86	21.65	22.07	23.31	23.32	23.94
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit; National	0.28	0.28	0.28	0.28	0.27	0.27	0.27	0.27
2-Digit, Ontario	0.64	0.62	0.62	0.62	0.61	0.62	0.60	0.60

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoriing Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	3.50	3.49	3.46	3.46	3.49	0.42	0.47	0.49	0.50
Change 1987 Capital Stock	3.04	3.04	3.04	3.04	3.04	0.00	0.00	0.00	0.00
Change 1988 Stock	0.09	0.09	0.09	0.09	0.09	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.37	0.36	0.33	0.33	0.36	0.42	0.47	0.49	0.50
Capital Costs ($current)	3.55	3.58	3.62	3.71	3.84	0.47	0.55	0.58	0.60
Nonresidential Structures	0.45	0.32	0.26	0.27	0.31	0.05	0.05	0.05	0.04
Machinery and Equipment	3.10	3.26	3.36	3.44	3.53	0.42	0.50	0.53	0.56
Capital Costs ($71)	1.46	1.45	1.44	1.44	1.46	0.17	0.20	0.21	0.21
Nonresidential Structures	0.14	0.10	0.08	0.08	0.08	0.01	0.01	0.01	0.01
Machinery and Equipment	1.32	1.35	1.36	1.36	1.37	0.16	0.18	0.19	0.20
ANNUAL CURRENT EXPENSES ($current)									
Total	0.81	1.63	2.40	3.20	4.06	4.24	4.49	4.68	4.94
Operating	0.34	0.70	1.09	1.51	1.95	2.06	2.20	2.34	2.51
Depreciation	0.48	0.93	1.31	1.70	2.11	2.18	2.29	2.33	2.43
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
2-Digit, Ontario	0.01	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.04

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.50	0.57	0.63	0.72	0.77	0.78	0.82	0.88
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.50	0.57	0.63	0.72	0.77	0.78	0.82	0.88
Capital Costs ($current)	0.62	0.73	0.84	0.98	1.08	1.14	1.23	1.37
Nonresidential Structures	0.04	0.05	0.05	0.06	0.07	0.08	0.08	0.09
Machinery and Equipment	0.58	0.68	0.78	0.92	1.01	1.06	1.15	1.28
Capital Costs ($71)	0.21	0.24	0.27	0.30	0.32	0.33	0.35	0.37
Nonresidential Structures	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Machinery and Equipment	0.20	0.23	0.26	0.29	0.31	0.32	0.33	0.36
ANNUAL CURRENT EXPENSES ($current)								
Total	5.25	5.50	5.82	6.24	6.65	7.21	7.64	8.20
Operating	2.70	2.90	3.12	3.38	3.68	4.02	4.38	4.78
Depreciation	2.56	2.61	2.70	2.86	2.98	3.19	3.26	3.41
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit,National	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
2-Digit, Ontario	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT

Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	29.81	29.78	29.52	29.50	29.86	1.37	1.23	1.26	0.93
Change 1987 Capital Stock	27.76	27.76	27.76	27.76	27.76	0.00	0.00	0.00	0.00
Change 1988 Stock	0.98	0.98	0.96	0.98	0.98	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.08	1.04	0.78	0.76	1.12	1.37	1.23	1.26	0.93
Capital Costs ($current)	31.46	32.33	33.01	34.10	35.40	1.67	1.55	1.64	1.25
Nonresidential Structures	5.63	6.52	7.25	7.67	8.72	0.45	0.44	0.48	0.37
Machinery and Equipment	25.84	25.82	25.76	26.43	26.67	1.22	1.11	1.16	0.88
Capital Costs ($71)	8.34	8.34	8.27	8.26	8.35	0.38	0.34	0.35	0.26
Nonresidential Structures	1.68	1.92	2.05	2.07	2.27	0.11	0.11	0.11	0.08
Machinery and Equipment	6.66	6.43	6.22	6.18	6.08	0.27	0.24	0.24	0.18
ANNUAL CURRENT EXPENSES ($current)									
Total	4.61	9.14	13.10	17.10	21.43	21.85	22.53	22.64	23.16
Operating	0.39	0.80	1.25	1.73	2.24	2.34	2.45	2.56	2.69
Depreciation	4.22	8.34	11.85	15.37	19.19	19.52	20.08	20.08	20.47
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.04	0.08	0.10	0.12	0.14	0.14	0.14	0.13	0.13
2-Digit, Ontario	0.11	0.22	0.28	0.33	0.41	0.40	0.40	0.38	0.37

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT

Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.98	1.15	1.13	1.02	0.56	0.92	1.45	1.46
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.98	1.15	1.13	1.02	0.56	0.92	1.45	1.46
Capital Costs ($current)	1.38	1.69	1.72	1.63	0.94	1.61	2.66	2.80
Nonresidential Structures	0.40	0.50	0.50	0.47	0.27	0.47	0.77	0.81
Machinery and Equipment	0.97	1.20	1.22	1.16	0.67	1.14	1.89	1.99
Capital Costs ($71)	0.27	0.32	0.31	0.28	0.16	0.26	0.41	0.41
Nonresidential Structures	0.08	0.10	0.09	0.09	0.05	0.08	0.12	0.12
Machinery and Equipment	0.19	0.22	0.22	0.20	0.11	0.18	0.29	0.29
ANNUAL CURRENT EXPENSES ($current)								
Total	23.88	23.93	24.23	24.93	25.11	26.09	26.05	26.58
Operating	2.83	2.98	3.14	3.31	3.49	3.70	3.94	4.18
Depreciation	21.05	20.95	21.09	21.62	21.63	22.39	22.11	22.40
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.13	0.12	0.12	0.11	0.11	0.10	0.10	0.09
2-Digit, Ontario	0.36	0.34	0.33	0.33	0.31	0.30	0.28	0.27

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-8, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	24.94	25.05	25.25	25.30	25.31	4.01	3.46	4.02	3.91
Change 1987 Capital Stock	21.06	21.06	21.06	21.06	21.06	0.00	0.00	0.00	0.00
Change 1988 Stock	0.78	0.78	0.78	0.78	0.78	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	3.10	3.21	3.41	3.46	3.47	4.01	3.46	4.02	3.91
Capital Costs ($current)	26.71	27.76	28.95	30.05	31.01	5.08	4.53	5.44	5.50
Nonresidential Structures	3.06	3.21	3.51	3.77	3.90	0.64	0.56	0.66	0.65
Machinery and Equipment	23.65	24.54	25.44	26.28	27.11	4.43	3.97	4.77	4.85
Capital Costs ($71)	7.89	7.93	7.99	8.01	8.01	1.27	1.09	1.27	1.24
Nonresidential Structures	0.90	0.93	0.98	1.01	1.00	0.16	0.13	0.15	0.14
Machinery and Equipment	6.99	7.00	7.01	7.00	7.01	1.11	0.96	1.12	1.10
ANNUAL CURRENT EXPENSES ($current)									
Total	6.31	12.78	19.07	25.64	32.60	34.37	36.40	38.10	40.42
Operating	2.73	5.66	8.86	12.32	15.92	16.99	18.15	19.39	20.82
Depreciation	3.58	7.12	10.21	13.32	16.67	17.38	18.25	18.71	19.59
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.09	0.19	0.25	0.32	0.39	0.39	0.40	0.40	0.40
2-Digit, Ontario	0.18	0.35	0.48	0.60	0.73	0.74	0.75	0.75	0.75

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-8, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	3.97	3.98	4.16	4.66	4.72	4.93	4.87	5.29
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	3.97	3.98	4.16	4.66	4.72	4.93	4.87	5.29
Capital Costs ($current)	5.80	6.05	6.56	7.67	8.08	8.79	9.05	10.24
Nonresidential Structures	0.66	0.67	0.72	0.81	0.84	0.89	0.89	1.00
Machinery and Equipment	5.14	5.38	5.85	6.86	7.24	7.90	8.16	9.24
Capital Costs ($71)	1.26	1.26	1.32	1.48	1.50	1.56	1.54	1.68
Nonresidential Structures	0.14	0.13	0.14	0.15	0.14	0.14	0.14	0.14
Machinery and Equipment	1.12	1.13	1.18	1.33	1.35	1.42	1.41	1.53
ANNUAL CURRENT EXPENSES ($current)								
Total	43.08	45.14	47.64	50.99	54.10	58.46	61.60	65.82
Operating	22.40	24.02	25.80	27.88	30.14	32.79	35.53	38.58
Depreciation	20.69	21.11	21.83	23.11	23.96	25.67	26.07	27.24
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.40	0.39	0.39	0.39	0.39	0.39	0.38	0.38
2-Digit, Ontario	0.75	0.74	0.73	0.74	0.74	0.74	0.73	0.72

FOUNDRIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-8, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	35.86	34.84	32.93	34.36	36.08	5.67	4.19	4.31	5.78
Change 1987 Capital Stock	29.54	29.54	29.54	29.54	29.54	0.00	0.00	0.00	0.00
Change 1988 Stock	0.93	0.93	0.93	0.93	0.93	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.39	4.36	2.46	3.88	5.61	5.67	4.19	4.31	5.78
Capital Costs ($current)	37.88	38.14	37.57	40.86	44.38	7.21	5.56	5.93	8.36
Nonresidential Structures	6.94	8.28	7.82	8.43	9.33	1.65	1.28	1.33	1.85
Machinery and Equipment	30.93	29.86	29.75	32.43	35.06	5.55	4.28	4.60	6.51
Capital Costs ($71)	10.11	9.84	9.31	9.71	10.19	1.60	1.18	1.22	1.63
Nonresidential Structures	2.04	2.40	2.19	2.25	2.40	0.41	0.30	0.30	0.40
Machinery and Equipment	8.07	7.44	7.12	7.45	7.79	1.19	0.88	0.91	1.23
ANNUAL CURRENT EXPENSES ($current)									
Total	14.24	28.64	42.42	57.64	74.42	78.91	83.59	87.62	93.65
Operating	9.16	18.70	28.52	39.51	51.47	54.97	58.52	62.11	66.83
Depreciation	5.08	9.94	13.90	18.13	22.94	23.94	25.07	25.52	26.82
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.16	0.31	0.41	0.51	0.62	0.64	0.64	0.64	0.65
2-Digit, Ontario	0.29	0.58	0.74	0.92	1.13	1.14	1.15	1.15	1.15

FOUNDRIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.77	8.20	8.35	8.02	7.03	9.52	11.12	11.06
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.77	8.20	8.35	8.02	7.03	9.52	11.12	11.06
Capital Costs ($current)	10.29	13.07	13.95	14.09	12.99	18.58	22.89	24.04
Nonresidential Structures	2.30	2.96	3.13	3.19	2.91	4.11	5.00	5.10
Machinery and Equipment	7.99	10.10	10.82	10.90	10.08	14.47	17.89	18.94
Capital Costs ($71)	1.91	2.32	2.36	2.26	1.99	2.69	3.14	3.12
Nonresidential Structures	0.48	0.59	0.59	0.57	0.50	0.66	0.76	0.73
Machinery and Equipment	1.44	1.73	1.77	1.69	1.49	2.03	2.38	2.39
ANNUAL CURRENT EXPENSES ($current)								
Total	100.97	108.40	116.79	126.45	135.51	148.67	161.62	176.54
Operating	72.37	78.64	85.46	92.92	100.59	110.55	121.76	133.89
Depreciation	28.60	29.75	31.33	33.53	34.92	38.12	39.85	42.65
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.65	0.65	0.66	0.67	0.68	0.69	0.69	0.70
2-Digit, Ontario	1.16	1.15	1.16	1.19	1.20	1.21	1.22	1.24

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-8, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	56.11	54.74	52.19	54.10	56.41	7.58	5.61	5.77	7.74
Change 1987 Capital Stock	47.40	47.40	47.40	47.40	47.40	0.00	0.00	0.00	0.00
Change 1988 Stock	1.50	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	7.21	5.84	3.29	5.20	7.51	7.58	5.61	5.77	7.74
Capital Costs ($current)	59.26	59.93	59.54	64.33	69.38	9.65	7.44	7.94	11.19
Nonresidential Structures	10.86	13.01	12.40	13.27	14.58	2.21	1.72	1.79	2.48
Machinery and Equipment	48.40	46.92	47.14	51.06	54.80	7.43	5.73	6.16	8.71
Capital Costs ($71)	15.82	15.47	14.75	15.28	15.93	2.14	1.58	1.63	2.19
Nonresidential Structures	3.20	3.78	3.47	3.55	3.75	0.55	0.41	0.41	0.54
Machinery and Equipment	12.63	11.69	11.28	11.73	12.18	1.59	1.18	1.22	1.65
ANNUAL CURRENT EXPENSES ($current)									
Total	15.57	31.17	45.74	61.59	79.06	83.14	87.55	90.90	96.39
Operating	7.62	15.59	23.86	33.06	43.01	45.72	48.51	51.32	54.99
Depreciation	7.95	15.58	21.87	28.53	36.05	37.42	39.04	39.58	41.40
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.17	0.34	0.44	0.54	0.66	0.67	0.67	0.67	0.66
2-Digit, Ontario	0.32	0.64	0.79	0.98	1.20	1.20	1.21	1.19	1.18

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	9.06	10.98	11.17	10.73	9.41	12.74	14.88	14.80
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	9.06	10.98	11.17	10.73	9.41	12.74	14.88	14.80
Capital Costs ($current)	13.77	17.48	18.67	18.85	17.39	24.86	30.63	32.16
Nonresidential Structures	3.08	3.97	4.19	4.27	3.89	5.50	6.69	6.82
Machinery and Equipment	10.69	13.52	14.48	14.58	13.49	19.36	23.94	25.34
Capital Costs ($71)	2.56	3.10	3.16	3.03	2.66	3.60	4.20	4.18
Nonresidential Structures	0.64	0.79	0.79	0.77	0.66	0.88	1.02	0.98
Machinery and Equipment	1.92	2.31	2.36	2.26	1.99	2.71	3.18	3.20
ANNUAL CURRENT EXPENSES ($current)								
Total	103.17	109.44	116.74	125.49	133.23	145.27	155.93	168.85
Operating	59.28	64.09	69.30	75.02	80.93	88.53	97.03	106.22
Depreciation	43.89	45.35	47.44	50.47	52.30	56.74	58.90	62.63
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.67	0.66	0.66	0.67	0.67	0.67	0.67	0.67
2-Digit, Ontario	1.18	1.16	1.16	1.18	1.18	1.19	1.18	1.18

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	118.09	114.91	108.97	113.41	118.79	17.67	13.08	13.45	18.03
Change 1987 Capital Stock	98.19	98.19	98.19	98.19	98.19	0.00	0.00	0.00	0.00
Change 1988 Stock	3.11	3.11	3.11	3.11	3.11	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	16.79	13.61	7.67	12.11	17.49	17.67	13.08	13.45	18.03
Capital Costs ($current)	124.73	125.81	124.31	134.87	146.11	22.48	17.35	18.51	26.07
Nonresidential Structures	22.86	27.31	25.89	27.82	30.70	5.16	4.00	4.16	5.77
Machinery and Equipment	101.87	98.50	98.43	107.04	115.41	17.32	13.34	14.35	20.30
Capital Costs ($71)	33.31	32.47	30.79	32.04	33.55	4.99	3.69	3.80	5.09
Nonresidential Structures	6.73	7.93	7.24	7.44	7.90	1.28	0.95	0.95	1.26
Machinery and Equipment	26.58	24.54	23.55	24.60	25.65	3.71	2.74	2.85	3.84
ANNUAL CURRENT EXPENSES ($current)									
Total	35.67	71.45	104.98	141.71	182.29	192.48	203.27	211.88	225.55
Operating	18.94	38.70	59.10	81.87	106.62	113.66	120.85	128.11	137.65
Depreciation	16.73	32.76	45.88	59.84	75.67	78.81	82.42	83.77	87.89
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.40	0.78	1.00	1.24	1.53	1.55	1.56	1.55	1.55
2-Digit, Ontario	0.73	1.46	1.82	2.25	2.76	2.78	2.80	2.79	2.77

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	21.12	25.58	26.04	25.00	21.94	29.68	34.69	34.50
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	21.12	25.58	26.04	25.00	21.94	29.68	34.69	34.50
Capital Costs ($current)	32.09	40.75	43.51	43.94	40.52	57.94	71.39	74.96
Nonresidential Structures	7.18	9.25	9.76	9.96	9.08	12.81	15.59	15.90
Machinery and Equipment	24.92	31.50	33.76	33.98	31.45	45.13	55.80	59.07
Capital Costs ($71)	5.97	7.23	7.35	7.06	6.20	8.38	9.79	9.74
Nonresidential Structures	1.49	1.83	1.84	1.79	1.55	2.06	2.37	2.28
Machinery and Equipment	4.48	5.39	5.51	5.27	4.65	6.32	7.42	7.46
ANNUAL CURRENT EXPENSES ($current)								
Total	242.34	258.47	277.05	298.96	318.71	348.78	376.50	409.47
Operating	148.81	161.41	175.09	190.08	205.51	225.48	247.92	272.18
Depreciation	93.53	97.06	101.95	108.88	113.20	123.30	128.59	137.29
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.57	1.56	1.56	1.59	1.59	1.61	1.61	1.63
2-Digit, Ontario	2.78	2.75	2.75	2.81	2.82	2.85	2.85	2.87

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	478.26	463.14	461.32	452.45	445.80	74.69	77.97	76.03	80.69
Change 1987 Capital Stock	303.78	303.78	303.78	303.78	303.78	0.00	0.00	0.00	0.00
Change 1988 Stock	53.16	53.16	53.16	53.16	53.16	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	121.32	106.20	104.38	95.51	88.86	74.69	77.97	76.03	80.69
Capital Costs ($current)	524.02	534.19	557.29	574.36	586.09	102.24	112.30	114.40	128.91
Nonresidential Structures	52.70	59.91	63.00	56.43	80.42	15.05	12.78	10.42	9.26
Machinery and Equipment	471.33	474.28	494.29	517.93	505.67	87.19	99.52	103.98	119.65
Capital Costs ($71)	148.95	144.34	143.80	141.02	139.00	23.29	24.31	23.70	25.15
Nonresidential Structures	15.70	17.61	17.82	15.25	20.91	3.76	3.06	2.39	2.03
Machinery and Equipment	133.26	126.74	125.98	125.78	118.09	19.53	21.25	21.31	23.12
ANNUAL CURRENT EXPENSES ($current)									
Total	76.17	150.32	216.29	282.63	353.03	369.36	391.83	404.33	427.22
Operating	5.87	11.97	18.57	25.54	32.72	34.94	37.54	40.14	43.24
Depreciation	70.30	138.35	197.72	257.09	320.31	334.41	354.29	364.19	383.97
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.56	1.09	1.32	1.57	1.85	1.85	1.87	1.84	1.82
2-Digit, Ontario	0.69	1.34	1.60	1.90	2.22	2.21	2.24	2.21	2.18

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	71.38	58.41	72.03	72.34	64.98	55.66	53.09	53.89
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	71.38	58.41	72.03	72.34	64.98	55.66	53.09	53.89
Capital Costs ($current)	121.02	104.77	136.86	145.98	138.89	127.28	129.35	139.82
Nonresidential Structures	8.30	7.45	8.49	8.75	8.28	4.70	3.11	2.33
Machinery and Equipment	112.72	97.33	128.38	137.24	130.61	122.59	126.24	137.49
Capital Costs ($71)	22.25	18.21	22.46	22.56	20.27	17.35	16.54	16.79
Nonresidential Structures	1.74	1.49	1.61	1.58	1.42	0.76	0.48	0.34
Machinery and Equipment	20.52	16.73	20.85	20.98	18.85	16.59	16.07	16.45
ANNUAL CURRENT EXPENSES ($current)								
Total	452.76	462.57	481.23	509.70	528.29	560.81	567.87	588.64
Operating	46.48	49.59	53.18	57.20	61.40	66.05	70.78	75.88
Depreciation	406.27	412.98	428.05	452.50	466.89	494.76	497.10	512.75
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.81	1.73	1.68	1.68	1.64	1.60	1.50	1.43
2-Digit, Ontario	2.16	2.07	2.01	2.02	1.96	1.92	1.79	1.71

PETROLEUM REFINING
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	55.96	54.31	54.80	53.98	52.84	1.69	0.39	2.28	2.57
Change 1987 Capital Stock	49.76	49.76	49.76	49.76	49.76	0.00	0.00	0.00	0.00
Change 1988 Stock	1.13	1.13	1.13	1.13	1.13	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.07	3.42	3.91	3.09	1.95	1.69	0.39	2.28	2.57
Capital Costs ($current)	61.61	62.39	65.17	67.54	69.11	2.30	0.56	3.44	4.11
Nonresidential Structures	47.83	45.05	49.20	50.90	51.47	1.73	0.43	2.47	2.80
Machinery and Equipment	13.78	17.34	15.98	16.64	17.65	0.57	0.13	0.97	1.31
Capital Costs ($71)	17.98	17.54	17.68	17.41	17.04	0.54	0.13	0.74	0.83
Nonresidential Structures	14.65	13.56	14.19	13.95	13.51	0.44	0.10	0.57	0.61
Machinery and Equipment	3.33	3.97	3.49	3.46	3.53	0.11	0.02	0.17	0.22
ANNUAL CURRENT EXPENSES ($current)									
Total	22.06	44.36	67.00	90.66	115.19	118.88	123.06	126.92	132.61
Operating	13.79	28.15	43.85	60.52	77.59	80.75	84.12	87.96	92.69
Depreciation	8.27	16.21	23.15	30.14	37.60	38.13	38.94	38.96	39.92
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.91	1.84	2.64	3.45	4.35	4.45	4.57	4.64	4.74
2-Digit, Ontario	2.08	4.21	5.94	7.70	9.59	9.73	9.93	10.07	10.21

PETROLEUM REFINING
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.55	1.10	3.65	5.80	5.10	6.79	8.77	9.70
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.55	1.10	3.65	5.80	5.10	6.79	8.77	9.70
Capital Costs ($current)	0.94	1.99	7.06	11.98	11.23	16.03	22.11	25.98
Nonresidential Structures	0.60	1.18	3.95	6.24	5.48	7.30	9.50	11.01
Machinery and Equipment	0.35	0.82	3.11	5.74	5.75	8.73	12.61	14.98
Capital Costs ($71)	0.18	0.35	1.18	1.88	1.66	2.20	2.85	3.15
Nonresidential Structures	0.12	0.23	0.74	1.11	0.92	1.16	1.42	1.56
Machinery and Equipment	0.05	0.12	0.44	0.77	0.73	1.04	1.42	1.59
ANNUAL CURRENT EXPENSES ($current)								
Total	138.01	142.34	149.02	158.68	167.69	180.69	193.20	208.68
Operating	97.17	101.85	107.81	115.36	123.24	133.11	144.24	156.71
Depreciation	40.83	40.49	41.21	43.31	44.44	47.58	48.96	51.97
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	4.82	4.85	4.95	5.15	5.28	5.49	5.61	5.81
2-Digit, Ontario	10.33	10.33	10.48	10.85	11.08	11.43	11.63	11.96

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	3.58	3.45	3.49	3.43	3.34	0.13	0.03	0.17	0.20
Change 1987 Capital Stock	3.12	3.12	3.12	3.12	3.12	0.00	0.00	0.00	0.00
Change 1988 Stock	0.07	0.07	0.07	0.07	0.07	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.39	0.26	0.30	0.24	0.15	0.13	0.03	0.17	0.20
Capital Costs ($current)	3.94	3.97	4.15	4.29	4.37	0.18	0.04	0.26	0.31
Nonresidential Structures	3.06	2.86	3.13	3.23	3.25	0.13	0.03	0.19	0.21
Machinery and Equipment	0.88	1.10	1.02	1.06	1.12	0.04	0.01	0.07	0.10
Capital Costs ($71)	1.15	1.11	1.13	1.11	1.08	0.04	0.01	0.06	9.06
Nonresidential Structures	0.94	0.86	0.90	0.89	0.85	0.03	0.01	0.04	0.05
Machinery and Equipment	0.21	0.25	0.22	0.22	0.22	0.01	0.00	0.01	0.02
ANNUAL CURRENT EXPENSES ($current)									
Total	1.31	2.61	3.94	5.31	6.74	6.96	7.20	7.43	7.77
Operating	0.78	1.58	2.46	3.40	4.35	4.53	4.72	4.94	5.22
Depreciation	0.53	1.03	1.48	1.92	2.39	2.43	2.48	2.49	2.55
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.05	0.11	0.15	0.20	0.25	0.26	0.27	0.27	0.28
2-Digit, Ontario	0.12	0.25	0.35	0.45	0.56	0.57	0.58	0.59	0.60

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.04	0.08	0.28	0.44	0.39	0.52	0.67	0.74
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.04	0.08	0.28	0.44	0.39	0.52	0.67	0.74
Capital Costs ($current)	0.07	0.15	0.54	0.92	0.86	1.23	1.69	1.99
Nonresidential Structures	0.05	0.09	0.30	0.48	0.42	0.56	0.73	0.84
Machinery and Equipment	0.03	0.06	0.24	0.44	0.44	0.67	0.96	1.14
Capital Costs ($71)	0.01	0.03	0.09	0.14	0.13	0.17	0.22	0.24
Nonresidential Structures	0.01	0.02	0.06	0.09	0.07	0.09	0.11	0.12
Machinery and Equipment	0.00	0.01	0.03	0.06	0.06	0.08	0.11	0.12
ANNUAL CURRENT EXPENSES ($current)								
Total	8.09	8.34	8.74	9.35	9.91	10.73	11.52	12.52
Operating	5.47	5.74	6.09	6.54	7.01	7.61	8.28	9.05
Depreciation	2.61	2.59	2.65	2.80	2.89	3.12	3.24	3.47
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.28	0.28	0.29	0.30	0.31	0.33	0.33	0.35
2-Digit, Ontario	0.61	0.61	0.61	0.64	0.65	0.68	0.69	0.72

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT

Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	223.11	227.76	227.89	231.07	232.94	24.46	16.55	9.19	3.19
Change 1987 Capital Stock	204.40	204.40	204.40	204.40	204.40	0.00	0.00	0.00	0.00
Change 1988 Stock	3.66	3.66	3.66	3.66	3.66	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	15.05	19.70	19.83	23.01	24.88	24.46	16.55	9.19	3.19
Capital Costs ($current)	239.01	251.33	259.78	272.98	282.71	30.54	21.34	12.19	4.39
Nonresidential Structures	47.81	51.62	54.48	53.68	52.46	5.52	4.02	2.42	0.93
Machinery and Equipment	191.20	199.71	205.30	219.30	230.25	25.02	17.33	9.17	3.47
Capital Costs ($71)	66.19	67.62	67.63	68.54	69.06	7.25	4.90	2.72	0.94
Nonresidential Structures	14.32	15.24	15.46	14.53	13.66	1.38	0.96	0.56	0.20
Machinery and Equipment	51.87	52.38	52.18	54.01	55.40	5.87	3.95	2.17	0.74
ANNUAL CURRENT EXPENSES ($current)									
Total	60.52	123.65	185.09	250.18	319.41	333.52	348.91	357.21	368.91
Operating	28.45	59.54	93.28	130.07	168.74	178.25	188.06	196.53	205.73
Depreciation	32.06	64.11	91.81	120.11	150.67	155.27	160.85	160.68	163.18
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.82	1.59	2.17	2.71	3.27	3.20	3.13	3.04	2.94
2-Digit, Ontario	1.39	2.72	3.70	4.64	5.60	5.48	5.38	5.24	5.09

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	2.22	7.32	8.09	16.92	-9.84	-6.98	6.26	21.34
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.22	7.32	8.09	16.92	-9.84	-6.98	6.26	21.34
Capital Costs ($current)	3.19	10.92	12.55	27.37	-16.60	-12.36	11.62	41.48
Nonresidential Structures	0.73	2.64	3.08	6.83	-4.35	-3.48	3.51	12.00
Machinery and Equipment	2.46	8.28	9.46	20.55	-12.26	-8.88	8.12	29.48
Capital Costs ($71)	0.66	2.17	2.40	5.01	-2.91	-2.07	1.86	6.33
Nonresidential Structures	0.15	0.52	0.58	1.23	-0.74	-0.56	0.53	1.72
Machinery and Equipment	0.51	1.64	1.81	3.78	-2.17	-1.51	1.32	4.61
ANNUAL CURRENT EXPENSES ($current)								
Total	382.47	392.27	405.05	426.07	433.69	449.70	462.67	488.37
Operating	215.66	226.54	238.31	253.37	263.87	276.99	293.17	314.28
Depreciation	166.81	165.73	166.74	172.70	169.81	172.71	169.50	174.10
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	2.85	2.74	2.65	2.62	2.51	2.44	2.34	2.32
2-Digit, Ontario	4.94	4.76	4.61	4.57	4.40	4.28	4.12	4.09

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	21.46	21.45	21.40	21.39	21.44	0.60	0.66	0.68	0.68
Change 1987 Capital Stock	20.76	20.76	20.76	20.76	20.76	0.00	0.00	0.00	0.00
Change 1988 Stock	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.56	0.55	0.50	0.49	0.53	0.60	0.66	0.68	0.68
Capital Costs ($current)	21.74	22.00	22.37	22.95	23.56	0.68	0.77	0.80	0.82
Nonresidential Structures	2.77	1.99	1.60	1.68	1.88	0.07	0.07	0.06	0.06
Machinery and Equipment	18.97	20.01	20.77	21.27	21.67	0.61	0.70	0.74	0.76
Capital Costs ($71)	8.96	8.93	8.90	8.91	8.94	0.25	0.28	0.29	0.28
Nonresidential Structures	0.87	0.62	0.48	0.47	0.51	0.02	0.02	0.02	0.01
Machinery and Equipment	8.10	8.31	8.43	8.43	8.43	0.23	0.26	0.27	0.27
ANNUAL CURRENT EXPENSES ($current)									
Total	6.77	13.70	20.53	27.70	35.27	36.33	37.76	38.77	40.31
Operating	3.85	7.98	12.44	17.25	22.27	23.16	24.24	25.30	26.58
Depreciation	2.92	5.72	8.09	10.46	12.99	13.16	13.51	13.47	13.74
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.07	0.13	0.18	0.24	0.28	0.28	0.27	0.26	0.26
2-Digit, Ontario	0.17	0.33	0.47	0.60	0.72	0.70	0.69	0.67	0.65

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoriing Expenses

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.68	0.76	0.84	0.94	1.00	1.02	1.06	1.14
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.68	0.76	0.84	0.94	1.00	1.02	1.06	1.14
Capital Costs ($current)	0.85	0.98	1.11	1.28	1.41	1.48	1.59	1.76
Nonresidential Structures	0.06	0.06	0.07	0.08	0.10	0.11	0.10	0.11
Machinery and Equipment	0.79	0.91	1.03	1.20	1.31	1.38	1.48	1.65
Capital Costs ($71)	0.28	0.32	0.35	0.39	0.42	0.43	0.45	0.48
Nonresidential Structures	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Machinery and Equipment	0.27	0.31	0.34	0.38	0.40	0.41	0.43	0.47
ANNUAL CURRENT EXPENSES ($current)								
Total	42.09	43.44	45.09	47.24	49.27	52.10	54.20	56.89
Operating	27.98	29.42	30.97	32.75	34.68	36.5[illegible]	39.26	41.77
Depreciation	14.11	14.03	14.12	14.50	14.59	15.16	14.94	15.12
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.25	0.24	0.24	0.23	0.23	0.22	0.21	0.21
2-Digit, Ontario	0.64	0.62	0.60	0.59	0.57	0.56	0.54	0.52

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SERIES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	72.05	71.40	65.07	72.88	76.96	8.82	9.28	14.39	11.68
Change 1987 Capital Stock	65.54	65.54	65.54	65.54	65.54	0.00	0.00	0.00	0.00
Change 1988 Stock	1.72	1.72	1.72	1.72	1.72	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	4.79	4.14	-2.19	5.62	9.70	8.82	9.28	14.39	11.68
Capital Costs ($current)	78.60	81.82	77.92	91.57	100.50	11.98	13.20	21.25	18.19
Nonresidential Structures	7.18	7.16	7.24	7.11	7.55	0.90	1.01	1.70	1.51
Machinery and Equipment	71.41	74.66	70.68	84.45	92.95	11.08	12.18	19.55	16.68
Capital Costs ($71)	20.39	20.23	18.44	20.64	21.80	2.50	2.63	4.08	3.31
Nonresidential Structures	2.12	2.08	2.03	1.91	1.95	0.22	0.24	0.39	0.33
Machinery and Equipment	18.27	18.14	16.41	18.74	19.85	2.27	2.39	3.69	2.98
ANNUAL CURRENT EXPENSES ($current)									
Total	25.79	52.41	76.72	105.48	137.46	144.44	153.21	162.77	173.66
Operating	15.25	31.43	47.55	66.75	87.80	93.04	99.23	106.84	114.88
Depreciation	10.54	20.97	29.17	38.73	49.66	51.40	53.97	55.93	58.78
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.65	1.30	1.66	2.08	2.57	2.57	2.58	2.60	2.59
2-Digit, Ontario	1.21	2.45	3.13	3.92	4.83	4.85	4.87	4.91	4.88

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SENES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	8.59	11.05	12.25	10.28	11.82	14.85	12.75	17.15
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	8.59	11.05	12.25	10.28	11.82	14.85	12.75	17.15
Capital Costs ($current)	14.13	19.18	22.40	19.87	24.09	32.05	29.11	41.44
Nonresidential Structures	1.15	1.48	1.68	1.47	1.85	2.43	2.17	3.08
Machinery and Equipment	12.99	17.69	20.72	18.40	22.23	29.62	26.94	38.36
Capital Costs ($71)	2.43	3.13	3.47	2.91	3.35	4.21	3.61	4.86
Nonresidential Structures	0.24	0.29	0.32	0.26	0.32	0.39	0.33	0.44
Machinery and Equipment	2.20	2.84	3.15	2.65	3.04	3.82	3.28	4.42
ANNUAL CURRENT EXPENSES ($current)								
Total	184.42	194.68	207.07	220.90	235.25	255.82	271.79	294.13
Operating	122.76	131.61	141.52	151.91	163.72	178.47	193.01	210.55
Depreciation	61.66	63.07	65.55	68.99	71.54	77.36	78.79	83.58
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	2.56	2.50	2.47	2.48	2.47	2.48	2.42	2.42
2-Digit, Ontario	4.83	4.70	4.61	4.57	4.51	4.52	4.40	4.37

POWER GENERATION
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	64.94	64.92	64.81	65.01	65.19	5.46	5.98	6.10	6.57
Change 1987 Capital Stock	58.14	58.14	58.14	58.14	58.14	0.00	0.00	0.00	0.00
Change 1988 Stock	1.81	1.81	1.81	1.81	1.81	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.00	4.97	4.86	5.06	5.24	5.46	5.98	6.10	6.57
Capital Costs ($current)	69.74	71.57	74.14	77.43	80.31	6.90	7.97	8.40	9.51
Nonresidential Structures	34.33	33.32	33.47	34.42	35.19	3.00	3.48	3.61	3.99
Machinery and Equipment	35.40	38.25	40.67	43.01	45.12	3.90	4.49	4.80	5.52
Capital Costs ($71)	19.97	19.93	19.89	19.96	20.02	1.68	1.84	1.87	2.02
Nonresidential Structures	9.27	8.89	8.61	8.48	8.34	0.70	0.76	0.76	0.80
Machinery and Equipment	10.70	11.04	11.28	11.48	11.67	0.98	1.08	1.12	1.22
ANNUAL CURRENT EXPENSES ($current)									
Total	10.72	21.30	30.77	40.49	50.95	52.47	54.77	55.79	58.09
Operating	1.36	2.82	4.40	6.11	7.89	8.30	8.79	9.28	9.87
Depreciation	9.36	18.47	26.37	34.38	43.06	44.17	45.98	46.51	48.21
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.06	0.11	0.16	0.20	0.24	0.24	0.24	0.23	0.23
2-Digit, Ontario	0.20	0.38	0.53	0.67	0.82	0.82	0.82	0.80	0.78

POWER GENERATION
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.57	6.89	7.34	7.54	8.10	8.39	9.06	10.05
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.57	6.89	7.34	7.54	8.10	8.39	9.06	10.05
Capital Costs ($current)	10.02	11.05	12.38	13.42	15.18	16.67	19.04	22.34
Nonresidential Structures	4.14	4.57	5.11	5.49	6.22	6.81	7.70	8.94
Machinery and Equipment	5.89	6.48	7.27	7.93	8.96	9.86	11.34	13.40
Capital Costs ($71)	2.02	2.11	2.25	2.31	2.49	2.57	2.78	3.09
Nonresidential Structures	0.79	0.83	0.89	0.91	0.97	1.00	1.07	1.18
Machinery and Equipment	1.23	1.28	1.37	1.41	1.51	1.57	1.71	1.91
ANNUAL CURRENT EXPENSES ($current)								
Total	60.91	62.19	64.25	67.54	70.01	74.61	76.45	80.26
Operating	10.53	11.20	11.94	12.78	13.70	14.78	15.92	17.20
Depreciation	50.39	50.99	52.31	54.76	56.31	59.83	60.52	63.07
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.22	0.21	0.20	0.19	0.19	0.18	0.17	0.17
2-Digit, Ontario	0.77	0.73	0.70	0.69	0.67	0.66	0.62	0.60

WASTE DISPOSAL, HOSPITAL COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	31.45	31.47	31.43	31.34	31.36	2.63	2.65	2.70	2.72
Change 1987 Capital Stock	27.92	27.92	27.92	27.92	27.92	0.00	0.00	0.00	0.00
Change 1988 Stock	0.83	0.83	0.83	0.83	0.83	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.70	2.72	2.69	2.59	2.62	2.63	2.65	2.70	2.72
Capital Costs ($current)	34.32	35.15	36.66	38.40	40.09	3.50	3.71	3.93	4.16
ANNUAL CURRENT EXPENSES ($current)									
Operating	2.90	6.01	9.38	12.99	16.77	17.64	18.65	19.66	20.87

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	2.84	2.91	2.96	3.00	3.04	3.07	3.16	3.27
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.84	2.91	2.96	3.00	3.04	3.07	3.16	3.27
Capital Costs ($current)	4.55	4.90	5.23	5.59	5.97	6.41	6.97	7.65
ANNUAL CURRENT EXPENSES ($current)								
Operating	22.20	23.58	25.06	26.72	28.53	30.62	32.79	35.15

WASTE DISPOSAL, MUNICIPAL COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	56.10	56.21	56.33	56.49	56.86	6.79	6.96	7.13	7.25
Change 1987 Capital Stock	48.50	48.50	48.50	48.50	48.50	0.00	0.00	0.00	0.00
Change 1988 Stock	1.73	1.73	1.73	1.73	1.73	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.87	5.98	6.11	6.26	6.63	6.79	6.96	7.13	7.25
Capital Costs ($current)	61.60	63.36	65.42	67.81	70.22	8.64	9.17	9.69	10.23
ANNUAL CURRENT EXPENSES ($current)									
Operating	0.69	1.42	2.23	3.09	4.00	4.24	4.51	4.79	5.12

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.99	7.10	7.20	7.27	7.31	7.40	7.51	7.63
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.99	7.10	7.20	7.27	7.31	7.40	7.51	7.63
Capital Costs ($current)	10.26	10.82	11.42	12.03	12.64	13.43	14.28	15.21
ANNUAL CURRENT EXPENSES ($current)								
Operating	5.48	5.85	6.25	6.70	7.18	7.74	8.33	8.96

PROVINCIAL GOVERNMENT OPERATING EXPENSES AND TAXES
(in millions of dollars)

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Total Expenditures, $86	16.90	16.91	16.92	16.93	16.94	0.61	0.62	0.63	0.65
Total Expenditures, $C	19.09	19.78	20.59	21.44	22.16	0.82	0.87	0.92	0.98
Total Expenditures, $71	5.33	5.33	5.34	5.34	5.34	0.19	0.20	0.20	0.20
of which:									
Labour	3.29	3.28	3.26	3.25	3.25	0.12	0.12	0.12	0.12
Goods and Services	2.04	2.05	2.07	2.09	2.09	0.07	0.08	0.08	0.08
Provincial Personal Tax Increa for Ministry and Hospitals	26.59	34.87	42.96	51.40	60.23	40.32	42.25	43.55	45.59

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Total Expenditures, $86	0.66	18.65	18.70	18.75	18.80	18.84	2.55	2.60
Total Expenditures, $C	1.05	31.04	32.51	34.18	35.98	38.08	5.42	5.82
Total Expenditures, $71	0.21	5.88	5.90	5.91	5.93	5.94	0.80	0.82
of which:								
Labour	0.13	3.61	3.64	3.66	3.67	3.68	0.50	0.51
Goods and Services	0.08	2.27	2.26	2.26	2.26	2.27	0.31	0.31
Provincial Personal Tax Increa for Ministry and Hospitals	48.01	79.61	83.11	87.52	91.71	97.41	66.99	70.60

DIRECT ADDITIONS TO EMPLOYMENT FROM OPERATING EXPENSES
(in thousands)

OME STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.02	0.05	0.07	0.09	0.11	0.12	0.12	0.12	0.12
Food, Manufacturing	0.08	0.16	0.24	0.31	0.38	0.38	0.37	0.37	0.38
Food, Hospitality	0.01	0.02	0.04	0.05	0.06	0.06	0.06	0.07	0.07
Pulp & Paper, Manufacturing	0.01	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.04
Pulp & Paper, Printing	0.02	0.04	0.06	0.08	0.10	0.10	0.10	0.10	0.10
Foundries, Non-ferrous, Steel	0.56	1.08	1.56	2.05	2.53	2.55	2.57	2.59	2.65
Automotive Industry	0.04	0.09	0.13	0.17	0.20	0.20	0.21	0.21	0.22
Petroleum Refining & Asphalt	0.15	0.29	0.43	0.56	0.68	0.67	0.66	0.66	0.66
Petrochemicals, Manufaturing	0.33	0.65	0.96	1.27	1.56	1.56	1.56	1.55	1.54
Petrochemicals, Dry Cleaning	0.09	0.18	0.27	0.37	0.45	0.46	0.46	0.46	0.46
Non-Metallic Minerals	0.30	0.59	0.84	1.11	1.39	1.40	1.41	1.45	1.48
Electric Power	0.01	0.02	0.04	0.05	0.06	0.06	0.06	0.06	0.06
Hospitals	0.06	0.12	0.19	0.25	0.31	0.31	0.32	0.32	0.33
Waste Disposal	0.01	0.02	0.04	0.05	0.06	0.06	0.06	0.06	0.06
Provincial Ministry	0.22	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01
Total, All Sectors	1.93	3.57	5.09	6.64	8.15	7.98	8.00	8.06	8.16

OME STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Open Pit Mines	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13
Food, Manufacturing	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Food, Hospitality	6.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09
Pulp & Paper, Manufacturing	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Pulp & Paper, Printing	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12
Foundries, Non-ferrous, Steel	2.71	2.78	2.84	2.91	2.96	3.04	3.13	3.21
Automotive Industry	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23
Petroleum Refining & Asphalt	0.66	0.65	0.65	0.66	0.66	0.67	0.68	0.69
Petrochemicals, Manufaturing	1.53	1.52	1.51	1.52	1.48	1.46	1.45	1.45
Petrochemicals, Dry Cleaning	0.46	0.47	0.47	0.47	0.48	0.48	0.48	0.48
Non-Metallic Minerals	1.49	1.51	1.54	1.56	1.58	1.61	1.63	1.67
Electric Power	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Hospitals	0.33	0.34	0.34	0.35	0.35	0.36	0.36	0.36
Waste Disposal	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Provincial Ministry	0.01	0.24	0.24	0.24	0.24	0.24	0.03	0.03
Total, All Sectors	8.24	8.56	8.66	8.77	8.83	8.94	8.85	9.00

OPERATING EXPENSES AS SHARE OF GDP IN
SEMES TARGETED INDUSTRIES
(in per cent)

ONE STUDY, SCEN-B, 08/22	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.71	1.31	2.07	2.67	3.27	3.21	3.17	3.24	3.41
Food, Manufacturing	1.01	2.02	2.80	3.57	4.41	4.45	4.47	4.44	4.43
Food, Hospitality	3.14	6.00	8.25	10.33	12.14	11.77	11.51	11.09	10.84
Pulp & Paper, Manufacturing	0.30	0.60	0.74	0.89	1.08	1.08	1.07	1.03	0.99
Pulp & Paper, Printing	0.23	0.45	0.62	0.77	0.94	0.95	0.96	0.96	0.96
Foundries	1.07	2.13	2.75	3.43	4.23	4.30	4.35	4.35	4.37
Non-ferrous Smelters	2.15	4.25	5.44	6.72	8.25	8.32	8.36	8.28	8.26
Iron & Steel Industry	0.91	1.81	2.32	2.87	3.54	3.58	3.62	3.59	3.59
Automotive Industry	1.40	2.72	3.30	3.92	4.62	4.60	4.67	4.59	4.55
Petroleum Refining	9.90	20.09	28.80	37.74	47.51	48.66	49.88	50.71	51.75
Asphalt	1.03	2.08	2.97	3.89	4.88	5.00	5.13	5.21	5.33
Petrochemicals, Manufaturing	2.40	4.68	6.37	7.98	9.62	9.40	9.21	8.95	8.66
Petrochemicals, Dry Cleaning	2.14	4.12	5.81	7.45	8.96	8.77	8.59	8.31	8.12
Non-Metallic Minerals	2.26	4.53	5.80	7.27	8.96	8.96	9.01	9.06	9.04
Electric Power	2.66	5.07	7.20	9.04	10.91	10.82	10.77	10.35	10.09

ONE STUDY, SCEN-B, 08/22	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Open Pit Mines	3.56	3.62	3.72	3.81	3.95	4.18	4.30	4.55
Food, Manufacturing	4.42	4.34	4.31	4.32	4.28	4.29	4.20	4.17
Food, Hospitality	10.66	10.33	10.10	10.02	9.85	9.84	9.63	9.53
Pulp & Paper, Manufacturing	0.96	0.92	0.89	0.88	0.83	0.81	0.75	0.72
Pulp & Paper, Printing	0.97	0.95	0.94	0.95	0.95	0.95	0.93	0.93
Foundries	4.42	4.42	4.46	4.55	4.58	4.65	4.69	4.75
Non-ferrous Smelters	8.29	8.19	8.17	8.29	8.27	8.34	8.30	8.33
Iron & Steel Industry	3.62	3.59	3.61	3.67	3.68	3.72	3.73	3.76
Automotive Industry	4.52	4.32	4.19	4.20	4.08	4.00	3.74	3.57
Petroleum Refining	52.71	53.04	54.11	56.28	57.73	59.93	61.32	63.50
Asphalt	5.43	5.46	5.58	5.82	5.99	6.25	6.42	6.69
Petrochemicals, Manufaturing	8.38	8.05	7.79	7.71	7.40	7.18	6.90	6.84
Petrochemicals, Dry Cleaning	7.95	7.70	7.51	7.38	7.17	7.00	6.77	6.60
Non-Metallic Minerals	8.92	8.72	8.63	8.65	8.62	8.64	8.43	8.43
Electric Power	9.82	9.29	8.91	8.69	8.35	8.22	7.75	7.50

TOTAL, ALL INDUSTRIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	550.60	546.52	533.18	546.49	557.89	63.01	50.10	50.94	51.24
Change 1987 Capital Stock	478.09	478.09	478.09	478.09	478.09	0.00	0.00	0.00	0.00
Change 1988 Stock	15.17	15.17	15.17	15.17	15.17	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	57.34	53.26	39.92	53.23	64.63	63.01	50.10	50.94	51.24
Capital Costs ($current)	589.75	606.28	613.96	655.88	691.99	81.04	67.39	71.82	76.12
Capital Costs ($71)	165.52	164.52	160.73	164.43	167.62	18.55	14.79	15.02	15.07
ANNUAL CURRENT EXPENSES ($current)									
Total	179.80	344.31	501.85	673.03	858.32	878.73	925.59	963.49	1017.21
Operating	87.56	179.94	276.58	384.10	499.37	529.97	562.60	596.31	637.15
Depreciation	73.16	144.59	204.68	267.50	336.79	347.93	362.12	366.26	379.07
Ministry Expenditures	19.09	19.78	20.59	21.44	22.16	0.82	0.87	0.92	0.98
Current Expenses as % of Ontario GDP	0.08	0.15	0.20	0.25	0.30	0.29	0.29	0.28	0.28

OME STUDY, SCEN-C, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	50.52	62.46	67.65	72.66	48.90	65.55	82.46	97.57
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	50.52	62.46	67.65	72.66	48.90	65.55	82.46	97.57
Capital Costs ($current)	78.40	101.11	115.59	129.82	95.68	134.32	174.96	216.30
Capital Costs ($71)	14.78	18.22	19.81	21.40	14.40	19.18	24.14	28.62
ANNUAL CURRENT EXPENSES ($current)								
Total	1078.50	1163.77	1231.72	1315.78	1387.80	1494.97	1555.23	1675.38
Operating	682.13	731.83	786.62	847.76	909.74	987.86	1073.50	1169.70
Depreciation	395.32	400.91	412.58	433.84	442.08	469.02	476.32	499.86
Ministry Expenditures	1.05	31.04	32.51	34.18	35.98	38.08	5.42	5.82
Current Expenses as % of Ontario GDP	0.28	0.28	0.27	0.27	0.27	0.27	0.26	0.26

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.01	0.01
Change 1987 Capital Stock	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01
Capital Costs ($current)	0.19	0.19	0.20	0.21	0.22	0.02	0.02	0.02	0.02
Nonresidential Structures	0.15	0.15	0.16	0.16	0.17	0.02	0.02	0.02	0.02
Machinery and Equipment	0.05	0.04	0.04	0.05	0.05	0.01	0.01	0.00	0.00
Capital Costs ($71)	0.06	0.06	0.06	0.05	0.06	0.01	0.01	0.00	0.00
Nonresidential Structures	0.04	0.05	0.04	0.04	0.04	0.00	0.00	0.00	0.00
Machinery and Equipment	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)									
Total	0.11	0.22	0.33	0.45	0.58	0.61	0.64	0.67	0.71
Operating	0.08	0.17	0.26	0.36	0.46	0.49	0.52	0.55	0.58
Depreciation	0.03	0.05	0.07	0.09	0.12	0.12	0.12	0.13	0.13
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2-Digit, Ontario	0.22	0.41	0.58	0.74	0.90	0.87	0.86	0.87	0.89

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02
Capital Costs ($current)	0.03	0.03	0.02	0.03	0.04	0.05	0.05	0.06
Nonresidential Structures	0.02	0.02	0.01	0.02	0.03	0.04	0.04	0.04
Machinery and Equipment	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Capital Costs ($71)	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Nonresidential Structures	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)								
Total	0.76	0.79	0.83	0.88	0.94	1.02	1.09	1.16
Operating	0.62	0.66	0.69	0.74	0.79	0.86	0.92	1.00
Depreciation	0.14	0.14	0.14	0.14	0.15	0.16	0.16	0.17
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
2-Digit, Ontario	0.92	0.93	0.94	0.97	1.02	1.06	1.10	1.14

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	7.44	7.36	7.43	7.34	7.38	0.62	0.48	0.58	0.61
Change 1987 Capital Stock	6.42	6.42	6.42	6.42	6.42	0.00	0.00	0.00	0.00
Change 1988 Stock	0.20	0.20	0.20	0.20	0.20	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.82	0.74	0.81	0.72	0.76	0.62	0.48	0.58	0.61
Capital Costs ($current)	8.15	8.47	8.96	9.28	9.68	0.84	0.69	0.85	0.95
Nonresidential Structures	1.26	1.26	1.51	1.59	1.80	0.15	0.13	0.18	0.22
Machinery and Equipment	6.89	7.21	7.45	7.68	7.88	0.69	0.56	0.68	0.73
Capital Costs ($71)	2.35	2.32	2.35	2.32	2.33	0.19	0.15	0.18	0.19
Nonresidential Structures	0.37	0.37	0.42	0.43	0.47	0.04	0.03	0.04	0.05
Machinery and Equipment	1.97	1.96	1.93	1.89	1.87	0.16	0.12	0.14	0.14
ANNUAL CURRENT EXPENSES ($current)									
Total	4.29	8.75	13.42	18.32	23.50	24.58	25.81	26.92	28.40
Operating	3.19	6.58	10.28	14.23	18.37	19.31	20.35	21.42	22.71
Depreciation	1.09	2.17	3.13	4.09	5.14	5.27	5.46	5.50	5.68
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.03	0.06	0.09	0.11	0.14	0.14	0.15	0.15	0.15
2-Digit, Ontario	0.07	0.14	0.20	0.26	0.32	0.32	0.33	0.33	0.33

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.59	0.76	0.79	0.69	0.75	0.88	0.81	0.80
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.59	0.76	0.79	0.69	0.75	0.88	0.81	0.80
Capital Costs ($current)	0.98	1.32	1.45	1.34	1.55	1.91	1.87	1.98
Nonresidential Structures	0.25	0.34	0.37	0.34	0.39	0.46	0.44	0.47
Machinery and Equipment	0.73	0.98	1.08	1.00	1.16	1.45	1.43	1.51
Capital Costs ($71)	0.19	0.24	0.25	0.22	0.24	0.28	0.26	0.25
Nonresidential Structures	0.05	0.07	0.07	0.06	0.07	0.07	0.07	0.07
Machinery and Equipment	0.14	0.17	0.18	0.16	0.17	0.20	0.19	0.19
ANNUAL CURRENT EXPENSES ($current)								
Total	30.04	31.65	33.49	35.55	37.71	40.52	42.99	45.83
Operating	24.12	25.67	27.34	29:15	31.15	33.56	35.99	38.60
Depreciation	5.92	5.99	6.14	6.40	6.56	6.96	7.00	7.22
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
2-Digit, Ontario	0.33	0.33	0.33	0.33	0.33	0.34	0.33	0.33

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoriing Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($current)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($71)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)									
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Operating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-Digit, Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($current)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($71)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)								
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Operating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit,National	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-Digit, Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	22.57	22.53	22.26	22.24	22.61	1.42	1.28	1.31	0.96
Change 1987 Capital Stock	20.72	20.72	20.72	20.72	20.72	0.00	0.00	0.00	0.00
Change 1988 Stock	0.73	0.73	0.73	0.73	0.73	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.12	1.08	0.81	0.79	1.17	1.42	1.28	1.31	0.96
Capital Costs ($current)	23.82	24.47	24.89	25.71	26.81	1.74	1.61	1.70	1.30
Nonresidential Structures	4.26	4.93	5.47	5.78	6.61	0.47	0.46	0.50	0.38
Machinery and Equipment	19.56	19.54	19.43	19.93	20.20	1.26	1.15	1.20	0.91
Capital Costs ($71)	6.31	6.31	6.23	6.22	6.33	0.40	0.36	0.37	0.27
Nonresidential Structures	1.27	1.45	1.55	1.56	1.72	0.12	0.11	0.12	0.08
Machinery and Equipment	5.04	4.86	4.69	4.66	4.61	0.28	0.25	0.25	0.18
ANNUAL CURRENT EXPENSES ($current)									
Total	3.32	6.57	9.35	12.16	15.21	15.55	16.07	16.15	16.54
Operating	0.12	0.25	0.40	0.55	0.71	0.74	0.78	0.82	0.86
Depreciation	3.20	6.31	8.96	11.61	14.50	14.81	15.29	15.34	15.68
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.03	0.06	0.07	0.08	0.10	0.10	0.10	0.10	0.09
2-Digit, Ontario	0.08	0.16	0.20	0.24	0.29	0.29	0.29	0.27	0.26

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	1.01	1.20	1.17	1.06	0.59	0.96	1.51	1.51
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.01	1.20	1.17	1.06	0.59	0.96	1.51	1.51
Capital Costs ($current)	1.43	1.76	1.79	1.70	0.98	1.68	2.77	2.91
Nonresidential Structures	0.42	0.51	0.52	0.49	0.29	0.49	0.80	0.84
Machinery and Equipment	1.01	1.24	1.27	1.21	0.69	1.19	1.96	2.07
Capital Costs ($71)	0.28	0.33	0.33	0.30	0.16	0.27	0.42	0.42
Nonresidential Structures	0.09	0.10	0.10	0.09	0.05	0.08	0.12	0.12
Machinery and Equipment	0.20	0.23	0.23	0.21	0.11	0.19	0.30	0.30
ANNUAL CURRENT EXPENSES ($current)								
Total	17.07	17.10	17.32	17.84	17.93	18.65	18.60	18.99
Operating	0.91	0.96	1.01	1.07	1.13	1.20	1.28	1.37
Depreciation	16.16	16.14	16.31	16.77	16.80	17.45	17.32	17.63
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07
2-Digit, Ontario	0.26	0.25	0.24	0.23	0.22	0.22	0.20	0.19

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	6.13	6.16	6.21	6.22	6.22	0.98	0.85	0.99	0.96
Change 1987 Capital Stock	5.18	5.18	5.18	5.18	5.18	0.00	0.00	0.00	0.00
Change 1988 Stock	0.19	0.19	0.19	0.19	0.19	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.76	0.79	0.84	0.85	0.85	0.98	0.85	0.99	0.96
Capital Costs ($current)	6.57	6.82	7.12	7.39	7.62	1.24	1.11	1.33	1.35
Nonresidential Structures	0.75	0.79	0.86	0.93	0.96	0.16	0.14	0.16	0.16
Machinery and Equipment	5.82	6.03	6.25	6.46	6.66	1.09	0.97	1.17	1.19
Capital Costs ($71)	1.94	1.95	1.96	1.97	1.97	0.31	0.27	0.31	0.30
Nonresidential Structures	0.22	0.23	0.24	0.25	0.25	0.04	0.03	0.04	0.03
Machinery and Equipment	1.72	1.72	1.72	1.72	1.72	0.27	0.24	0.28	0.27
ANNUAL CURRENT EXPENSES ($current)									
Total	1.88	3.83	5.76	7.79	9.94	10.51	11.14	11.71	12.45
Operating	1.00	2.08	3.25	4.52	5.84	6.23	6.66	7.11	7.64
Depreciation	0.88	1.75	2.51	3.28	4.10	4.27	4.49	4.60	4.82
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.03	0.06	0.08	0.10	0.12	0.12	0.12	0.12	0.12
2-Digit, Ontario	0.05	0.11	0.15	0.18	0.22	0.23	0.23	0.23	0.23

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.97	0.98	1.02	1.14	1.16	1.21	1.19	1.30
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.97	0.98	1.02	1.14	1.16	1.21	1.19	1.30
Capital Costs ($current)	1.42	1.48	1.61	1.88	1.98	2.15	2.22	2.51
Nonresidential Structures	0.16	0.16	0.18	0.20	0.21	0.22	0.22	0.24
Machinery and Equipment	1.26	1.32	1.43	1.68	1.77	1.94	2.00	2.27
Capital Costs ($71)	0.31	0.31	0.32	0.36	0.37	0.38	0.38	0.41
Nonresidential Structures	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04
Machinery and Equipment	0.27	0.28	0.29	0.33	0.33	0.35	0.35	0.38
ANNUAL CURRENT EXPENSES ($current)								
Total	13.30	14.00	14.83	15.90	16.94	18.33	19.43	20.83
Operating	8.21	8.81	9.46	10.22	11.05	12.02	13.02	14.14
Depreciation	5.08	5.19	5.36	5.68	5.89	6.31	6.40	6.69
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
2-Digit, Ontario	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23

FOUNDRIES

Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	32.52	31.59	29.85	31.15	32.73	5.17	3.83	3.94	5.28
Change 1987 Capital Stock	26.76	26.76	26.76	26.76	26.76	0.00	0.00	0.00	0.00
Change 1988 Stock	0.85	0.85	0.85	0.85	0.85	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	4.92	3.98	2.24	3.55	5.12	5.17	3.83	3.94	5.28
Capital Costs ($current)	34.35	34.59	34.05	37.04	40.25	6.58	5.08	5.42	7.63
Nonresidential Structures	6.29	7.51	7.09	7.64	8.46	1.51	1.17	1.22	1.69
Machinery and Equipment	28.06	27.08	26.96	29.40	31.79	5.07	3.91	4.20	5.94
Capital Costs ($71)	9.17	8.93	8.43	8.80	9.24	1.46	1.08	1.11	1.49
Nonresidential Structures	1.85	2.18	1.98	2.04	2.18	0.37	0.28	0.28	0.37
Machinery and Equipment	7.32	6.75	6.45	6.76	7.07	1.09	0.80	0.83	1.12
ANNUAL CURRENT EXPENSES ($current)									
Total	12.54	25.21	37.31	50.65	65.38	69.33	73.44	76.97	82.26
Operating	7.93	16.20	24.70	34.21	44.58	47.62	50.70	53.82	57.92
Depreciation	4.61	9.01	12.60	16.44	20.80	21.71	22.74	23.15	24.34
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.14	0.28	0.36	0.44	0.55	0.56	0.56	0.56	0.57
2-Digit, Ontario	0.26	0.51	0.65	0.80	0.99	1.00	1.01	1.01	1.01

FOUNDRIES

Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.18	7.49	7.62	7.32	6.42	8.69	10.15	10.10
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.18	7.49	7.62	7.32	6.42	8.69	10.15	10.10
Capital Costs ($current)	9.39	11.93	12.74	12.86	11.86	16.96	20.90	21.94
Nonresidential Structures	2.10	2.71	2.86	2.91	2.66	3.75	4.56	4.65
Machinery and Equipment	7.29	9.22	9.88	9.95	9.20	13.21	16.33	17.29
Capital Costs ($71)	1.75	2.12	2.15	2.07	1.81	2.45	2.87	2.85
Nonresidential Structures	0.44	0.54	0.54	0.52	0.45	0.60	0.69	0.67
Machinery and Equipment	1.31	1.58	1.61	1.54	1.36	1.85	2.17	2.18
ANNUAL CURRENT EXPENSES ($current)								
Total	88.70	95.20	102.57	111.06	119.00	130.58	141.91	155.01
Operating	62.73	68.19	74.12	80.60	87.27	95.93	105.68	116.23
Depreciation	25.96	27.02	28.45	30.46	31.73	34.65	36.23	38.78
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.57	0.57	0.58	0.59	0.59	0.60	0.61	0.62
2-Digit, Ontario	1.02	1.01	1.02	1.04	1.05	1.07	1.07	1.09

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	38.28	37.28	35.42	36.81	38.50	5.54	4.10	4.22	5.65
Change 1987 Capital Stock	32.00	32.00	32.00	32.00	32.00	0.00	0.00	0.00	0.00
Change 1988 Stock	1.01	1.01	1.01	1.01	1.01	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.26	4.27	2.40	3.80	5.48	5.54	4.10	4.22	5.65
Capital Costs ($current)	40.43	40.81	40.40	43.77	47.35	7.05	5.44	5.80	8.17
Nonresidential Structures	7.41	8.86	8.41	9.03	9.95	1.62	1.25	1.30	1.81
Machinery and Equipment	33.02	31.95	31.99	34.74	37.40	5.43	4.18	4.50	6.36
Capital Costs ($71)	10.80	10.53	10.01	10.40	10.87	1.56	1.16	1.19	1.60
Nonresidential Structures	2.18	2.57	2.35	2.41	2.56	0.40	0.30	0.30	0.39
Machinery and Equipment	8.61	7.96	7.65	7.98	8.31	1.16	0.86	0.89	1.20
ANNUAL CURRENT EXPENSES ($current)									
Total	11.12	22.27	32.70	44.09	56.67	59.75	63.03	65.61	69.74
Operating	5.70	11.65	17.81	24.67	32.12	34.21	36.35	38.51	41.34
Depreciation	5.42	10.62	14.89	19.42	24.55	25.54	26.69	27.10	28.40
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.12	0.24	0.31	0.39	0.48	0.48	0.48	0.48	0.48
2-Digit, Ontario	0.23	0.45	0.57	0.70	0.86	0.86	0.87	0.86	0.86

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.62	8.02	8.16	7.84	6.88	9.30	10.87	10.82
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.62	8.02	8.16	7.84	6.88	9.30	10.87	10.82
Capital Costs ($current)	10.06	12.77	13.64	13.77	12.70	18.16	22.38	23.50
Nonresidential Structures	2.25	2.90	3.06	3.12	2.85	4.01	4.89	4.98
Machinery and Equipment	7.81	9.87	10.58	10.65	9.86	14.15	17.49	18.52
Capital Costs ($71)	1.87	2.27	2.31	2.21	1.94	2.63	3.07	3.05
Nonresidential Structures	0.47	0.57	0.58	0.56	0.48	0.65	0.74	0.72
Machinery and Equipment	1.40	1.69	1.73	1.65	1.46	1.98	2.33	2.34
ANNUAL CURRENT EXPENSES ($current)								
Total	74.83	79.65	85.23	91.84	97.76	106.85	115.11	124.99
Operating	44.64	48.37	52.41	56.84	61.41	67.32	73.94	81.09
Depreciation	30.19	31.28	32.81	35.00	36.35	39.54	41.17	43.90
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.48	0.48	0.48	0.49	0.49	0.49	0.49	0.50
2-Digit, Ontario	0.86	0.85	0.85	0.86	0.87	0.87	0.87	0.87

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	96.43	93.82	88.95	92.59	97.00	14.48	10.72	11.02	14.78
Change 1987 Capital Stock	80.13	80.13	80.13	80.13	80.13	0.00	0.00	0.00	0.00
Change 1988 Stock	2.53	2.53	2.53	2.53	2.53	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	13.76	11.15	6.28	9.93	14.34	14.48	10.72	11.02	14.78
Capital Costs ($current)	101.85	102.72	101.48	110.11	119.31	18.42	14.21	15.17	21.36
Nonresidential Structures	18.66	22.30	21.13	22.71	25.07	4.23	3.28	3.41	4.73
Machinery and Equipment	83.19	80.42	80.35	87.39	94.24	14.19	10.93	11.76	16.64
Capital Costs ($71)	27.20	26.51	25.13	26.16	27.40	4.09	3.03	3.11	4.17
Nonresidential Structures	5.49	6.48	5.91	6.07	6.45	1.05	0.78	0.78	1.03
Machinery and Equipment	21.70	20.03	19.23	20.08	20.94	3.04	2.25	2.34	3.14
ANNUAL CURRENT EXPENSES ($current)									
Total	42.10	84.85	126.19	171.76	221.86	235.02	248.78	260.80	278.53
Operating	28.44	58.10	88.73	122.91	160.07	170.66	181.47	192.39	206.73
Depreciation	13.66	26.75	37.46	48.86	61.79	64.36	67.30	68.41	71.79
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.47	0.93	1.21	1.51	1.86	1.89	1.91	1.91	1.92
2-Digit, Ontario	0.86	1.73	2.19	2.73	3.36	3.40	3.43	3.43	3.42

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	17.31	20.96	21.34	20.48	17.98	24.32	28.42	28.27
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	17.31	20.96	21.34	20.48	17.98	24.32	28.42	28.27
Capital Costs ($current)	26.30	33.39	35.65	36.00	33.20	47.48	58.50	61.43
Nonresidential Structures	5.88	7.58	7.99	8.16	7.44	10.49	12.78	13.03
Machinery and Equipment	20.42	25.81	27.66	27.85	25.77	36.98	45.72	48.40
Capital Costs ($71)	4.89	5.92	6.03	5.79	5.08	6.87	8.02	7.98
Nonresidential Structures	1.22	1.50	1.51	1.46	1.27	1.69	1.94	1.87
Machinery and Equipment	3.67	4.42	4.52	4.32	3.81	5.18	6.08	6.11
ANNUAL CURRENT EXPENSES ($current)								
Total	299.92	321.77	346.36	374.57	401.33	439.64	477.73	521.37
Operating	223.51	242.46	263.05	285.58	308.80	338.85	372.60	409.11
Depreciation	76.41	79.30	83.31	88.99	92.53	100.80	105.13	112.26
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.94	1.94	1.95	1.99	2.00	2.03	2.05	2.07
2-Digit, Ontario	3.43	3.42	3.44	3.52	3.55	3.59	3.62	3.65

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	34.24	33.15	33.02	32.39	31.91	5.37	5.60	5.47	5.80
Change 1987 Capital Stock	21.72	21.72	21.72	21.72	21.72	0.00	0.00	0.00	0.00
Change 1988 Stock	3.80	3.80	3.80	3.80	3.80	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	8.72	7.63	7.50	6.87	6.39	5.37	5.60	5.47	5.80
Capital Costs ($current)	37.52	38.24	39.89	41.11	41.95	7.35	8.07	8.22	9.27
Nonresidential Structures	3.77	4.29	4.51	4.04	5.76	1.08	0.92	0.75	0.67
Machinery and Equipment	33.75	33.95	35.38	37.07	36.19	6.27	7.15	7.47	8.60
Capital Costs ($71)	10.66	10.33	10.29	10.09	9.95	1.67	1.75	1.70	1.81
Nonresidential Structures	1.12	1.26	1.28	1.09	1.50	0.27	0.22	0.17	0.15
Machinery and Equipment	9.54	9.07	9.02	9.00	8.45	1.40	1.53	1.53	1.66
ANNUAL CURRENT EXPENSES ($current)									
Total	10.67	21.40	31.97	42.91	54.33	57.47	61.40	64.61	69.01
Operating	5.64	11.49	17.82	24.51	31.40	33.53	36.03	38.53	41.51
Depreciation	5.03	9.90	14.15	18.40	22.93	23.94	25.37	26.08	27.50
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.08	0.16	0.20	0.24	0.29	0.29	0.29	0.29	0.29
2-Digit, Ontario	0.10	0.19	0.24	0.29	0.34	0.34	0.35	0.35	0.35

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	5.13	4.20	5.18	5.20	4.67	4.00	3.82	3.87
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	5.13	4.20	5.18	5.20	4.67	4.00	3.82	3.87
Capital Costs ($current)	8.70	7.53	9.84	10.49	9.98	9.15	9.30	10.05
Nonresidential Structures	0.60	0.54	0.61	0.63	0.59	0.34	0.22	0.17
Machinery and Equipment	8.10	7.00	9.23	9.87	9.39	8.81	9.07	9.88
Capital Costs ($71)	1.60	1.31	1.61	1.62	1.46	1.25	1.19	1.21
Nonresidential Structures	0.12	0.11	0.12	0.11	0.10	0.05	0.03	0.02
Machinery and Equipment	1.47	1.20	1.50	1.51	1.35	1.19	1.16	1.18
ANNUAL CURRENT EXPENSES ($current)								
Total	73.73	77.20	81.73	87.35	92.43	98.89	103.61	109.64
Operating	44.63	47.61	51.06	54.93	58.97	63.43	67.98	72.88
Depreciation	29.10	29.59	30.67	32.43	33.46	35.46	35.63	36.76
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.30	0.29	0.29	0.29	0.29	0.28	0.27	0.27
2-Digit, Ontario	0.35	0.35	0.34	0.35	0.34	0.34	0.33	0.32

PETROLEUM REFINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	37.71	36.60	36.93	36.38	35.61	1.14	0.26	1.54	1.73
Change 1987 Capital Stock	33.54	33.54	33.54	33.54	33.54	0.00	0.00	0.00	0.00
Change 1988 Stock	0.76	0.76	0.76	0.76	0.76	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	3.41	2.30	2.63	2.08	1.31	1.14	0.26	1.54	1.73
Capital Costs ($current)	41.52	42.05	43.92	45.51	46.58	1.55	0.37	2.31	2.76
Nonresidential Structures	32.23	30.36	33.15	34.30	34.69	1.17	0.29	1.66	1.88
Machinery and Equipment	9.29	11.69	10.77	11.21	11.89	0.38	0.09	0.65	0.88
Capital Costs ($71)	12.11	11.82	11.91	11.74	11.49	0.37	0.08	0.50	0.56
Nonresidential Structures	9.87	9.14	9.56	9.40	9.11	0.29	0.07	0.38	0.41
Machinery and Equipment	2.24	2.68	2.35	2.33	2.38	0.07	0.02	0.11	0.15
ANNUAL CURRENT EXPENSES ($current)									
Total	10.19	20.36	30.30	40.59	51.34	52.75	54.43	55.73	57.96
Operating	4.62	9.43	14.69	20:28	26.00	27.06	28.19	29.48	31.06
Depreciation	5.57	10.93	15.60	20.31	25.34	25.69	26.24	26.25	26.90
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.42	0.84	1.19	1.55	1.94	1.98	2.02	2.04	2.07
2-Digit, Ontario	0.96	1.93	2.68	3.45	4.27	4.32	4.39	4.42	4.46

PETROLEUM REFINING

Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.37	0.74	2.45	1.90	3.43	4.57	5.90	6.52
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.37	0.74	2.45	1.90	3.43	4.57	5.90	6.52
Capital Costs ($current)	0.63	1.34	4.75	8.05	7.55	10.77	14.86	17.46
Nonresidential Structures	0.40	0.79	2.66	4.19	3.68	4.91	6.39	7.40
Machinery and Equipment	0.23	0.55	2.09	3.86	3.87	5.87	8.47	10.07
Capital Costs ($71)	0.12	0.24	0.80	1.27	1.11	1.48	1.91	2.12
Nonresidential Structures	0.08	0.16	0.50	0.75	0.62	0.78	0.96	1.05
Machinery and Equipment	0.04	0.08	0.30	0.52	0.49	0.70	0.96	1.07
ANNUAL CURRENT EXPENSES ($current)								
Total	60.08	61.41	63.89	67.84	71.23	76.65	81.30	87.50
Operating	32.56	34.13	36.13	38.65	41.29	44.60	48.32	52.50
Depreciation	27.52	27.28	27.77	29.18	29.94	32.05	32.98	35.00
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	2.10	2.09	2.12	2.20	2.24	2.33	2.36	2.44
2-Digit, Ontario	4.50	4.46	4.49	4.64	4.71	4.85	4.89	5.02

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	3.13	3.02	3.05	2.99	2.92	0.12	0.03	0.16	0.18
Change 1987 Capital Stock	2.72	2.72	2.72	2.72	2.72	0.00	0.00	0.00	0.00
Change 1988 Stock	0.06	0.06	0.06	0.06	0.06	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.35	0.23	0.27	0.21	0.13	0.12	0.03	0.16	0.18
Capital Costs ($current)	3.44	3.46	3.63	3.74	3.81	0.16	0.04	0.24	0.28
Nonresidential Structures	2.67	2.50	2.74	2.82	2.84	0.12	0.03	0.17	0.19
Machinery and Equipment	0.77	0.96	0.89	0.92	0.97	0.04	0.01	0.07	0.09
Capital Costs ($71)	1.01	0.97	0.98	0.97	0.94	0.04	0.01	0.05	0.06
Nonresidential Structures	0.82	0.75	0.79	0.77	0.75	0.03	0.01	0.04	0.04
Machinery and Equipment	0.19	0.22	0.19	0.19	0.19	0.01	0.00	0.01	0.01
ANNUAL CURRENT EXPENSES ($current)									
Total	1.22	2.44	3.68	4.97	6.30	6.51	6.74	6.96	7.29
Operating	0.75	1.53	2.39	3.29	4.21	4.39	4.57	4.79	5.06
Depreciation	0.46	0.90	1.29	1.68	2.09	2.12	2.17	2.17	2.23
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.05	0.10	0.14	0.19	0.24	0.24	0.25	0.25	0.26
2-Digit, Ontario	0.11	0.23	0.33	0.42	0.52	0.53	0.54	0.55	0.56

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.04	0.07	0.25	0.40	0.35	0.46	0.60	0.66
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.04	0.07	0.25	0.40	0.35	0.46	0.60	0.66
Capital Costs ($current)	0.06	0.14	0.48	0.82	0.77	1.10	1.51	1.78
Nonresidential Structures	0.04	0.08	0.27	0.43	0.37	0.50	0.65	0.75
Machinery and Equipment	0.02	0.06	0.21	0.39	0.39	0.60	0.86	1.02
Capital Costs ($71)	0.01	0.02	0.08	0.13	0.11	0.15	0.19	0.22
Nonresidential Structures	0.01	0.02	0.05	0.08	0.06	0.08	0.10	0.11
Machinery and Equipment	0.00	0.01	0.03	0.05	0.05	0.07	0.10	0.11
ANNUAL CURRENT EXPENSES ($current)								
Total	7.59	7.83	8.23	8.81	9.34	10.12	10.90	11.85
Operating	5.31	5.57	5.91	6.35	6.81	7.39	8.05	8.80
Depreciation	2.29	2.27	2.32	2.46	2.54	2.74	2.84	3.05
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.27	0.27	0.27	0.29	0.29	0.31	0.32	0.33
2-Digit, Ontario	0.57	0.57	0.58	0.60	0.62	0.64	0.66	0.68

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	160.15	163.50	163.59	165.89	167.23	17.62	11.93	6.62	2.30
Change 1987 Capital Stock	146.68	146.68	146.68	146.68	146.68	0.00	0.00	0.00	0.00
Change 1988 Stock	2.63	2.63	2.63	2.63	2.63	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	10.84	14.19	14.28	16.58	17.92	17.62	11.93	6.62	2.30
Capital Costs ($current)	171.56	180.42	186.48	195.97	202.96	22.00	15.38	8.78	3.16
Nonresidential Structures	34.32	37.06	39.11	38.54	37.66	3.98	2.89	1.74	0.67
Machinery and Equipment	137.25	143.36	147.37	157.43	165.30	18.02	12.48	7.04	2.50
Capital Costs ($71)	47.51	48.54	48.55	49.20	49.58	5.22	3.53	1.96	0.68
Nonresidential Structures	10.28	10.94	11.09	10.43	9.81	0.99	0.69	0.40	0.15
Machinery and Equipment	37.23	37.60	37.46	38.77	39.77	4.23	2.84	1.56	0.53
ANNUAL CURRENT EXPENSES ($current)									
Total	36.58	74.41	110.39	148.25	188.64	196.49	205.19	209.11	215.30
Operating	13.57	28.40	44.49	62.03	80.48	85.02	89.70	93.75	98.14
Depreciation	23.02	46.02	65.90	86.22	108.16	111.47	115.48	115.37	117.16
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.49	0.96	1.29	1.61	1.93	1.88	1.84	1.78	1.72
2-Digit, Ontario	0.84	1.64	2.21	2.75	3.30	3.23	3.17	3.07	2.97

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	1.60	5.27	5.83	12.19	-7.09	-5.03	4.51	15.37
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	1.60	5.27	5.83	12.19	-7.09	-5.03	4.51	15.37
Capital Costs ($current)	2.30	7.86	9.04	19.72	-11.96	-8.91	8.37	29.89
Nonresidential Structures	0.52	1.90	2.22	4.92	-3.13	-2.51	2.53	8.65
Machinery and Equipment	1.77	5.96	6.82	14.80	-8.83	-6.40	5.85	21.24
Capital Costs ($71)	0.47	1.56	1.73	3.61	-2.10	-1.49	1.34	4.56
Nonresidential Structures	0.11	0.38	0.42	0.88	-0.53	-0.40	0.38	1.24
Machinery and Equipment	0.37	1.18	1.31	2.73	-1.57	-1.09	0.95	3.32
ANNUAL CURRENT EXPENSES ($current)								
Total	222.65	227.06	233.41	244.88	247.82	256.15	261.57	274.96
Operating	102.88	108.06	113.68	120.87	125.88	132.13	139.86	149.93
Depreciation	119.77	119.00	119.72	124.01	121.94	124.01	121.71	125.02
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.66	1.58	1.52	1.51	1.44	1.39	1.33	1.31
2-Digit, Ontario	2.87	2.75	2.66	2.63	2.51	2.44	2.33	2.30

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	21.46	21.45	21.40	21.39	21.44	0.60	0.66	0.68	0.68
Change 1987 Capital Stock	20.76	20.76	20.76	20.76	20.76	0.00	0.00	0.00	0.00
Change 1988 Stock	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.56	0.55	0.50	0.49	0.53	0.60	0.66	0.68	0.68
Capital Costs ($current)	21.74	22.00	22.37	22.95	23.56	0.68	0.77	0.80	0.82
Nonresidential Structures	2.77	1.99	1.60	1.68	1.88	0.07	0.07	0.06	0.06
Machinery and Equipment	18.97	20.01	20.77	21.27	21.67	0.61	0.70	0.74	0.76
Capital Costs ($71)	8.96	8.93	8.90	8.91	8.94	0.25	0.28	0.29	0.28
Nonresidential Structures	0.87	0.62	0.48	0.47	0.51	0.02	0.02	0.02	0.01
Machinery and Equipment	8.10	8.31	8.43	8.43	8.43	0.23	0.26	0.27	0.27
ANNUAL CURRENT EXPENSES ($current)									
Total	3.27	6.44	9.22	12.02	15.02	15.27	15.72	15.77	16.15
Operating	0.35	0.73	1.13	1.57	2.02	2.11	2.20	2.30	2.42
Depreciation	2.92	5.72	8.09	10.46	12.99	13.16	13.51	13.47	13.74
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.03	0.06	0.08	0.10	0.12	0.12	0.11	0.11	0.10
2-Digit, Ontario	0.08	0.16	0.21	0.26	0.31	0.30	0.29	0.27	0.26

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.68	0.76	0.84	0.94	1.00	1.02	1.06	1.14
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.68	0.76	0.84	0.94	1.00	1.02	1.06	1.14
Capital Costs ($current)	0.85	0.98	1.11	1.28	1.41	1.48	1.59	1.76
Nonresidential Structures	0.06	0.06	0.07	0.08	0.10	0.11	0.10	0.11
Machinery and Equipment	0.79	0.91	1.03	1.20	1.31	1.38	1.48	1.65
Capital Costs ($71)	0.28	0.32	0.35	0.39	0.42	0.43	0.45	0.48
Nonresidential Structures	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Machinery and Equipment	0.27	0.31	0.34	0.38	0.40	0.41	0.43	0.47
ANNUAL CURRENT EXPENSES ($current)								
Total	16.66	16.70	16.93	17.47	17.75	18.51	18.51	18.92
Operating	2.54	2.67	2.82	2.98	3.15	3.36	3.57	3.80
Depreciation	14.11	14.03	14.12	14.50	14.59	15.16	14.94	15.12
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.10	0.09	0.09	0.09	0.08	0.08	0.07	0.07
2-Digit, Ontario	0.25	0.24	0.23	0.22	0.21	0.20	0.18	0.17

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SEMES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	55.68	55.17	50.21	56.33	59.53	6.91	7.28	11.28	9.16
Change 1987 Capital Stock	50.60	50.60	50.60	50.60	50.60	0.00	0.00	0.00	0.00
Change 1988 Stock	1.33	1.33	1.33	1.33	1.33	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	3.76	3.25	-1.72	4.41	7.60	6.91	7.28	11.28	9.16
Capital Costs ($current)	60.74	63.22	60.13	70.78	77.74	9.39	10.34	16.66	14.26
Nonresidential Structures	5.55	5.53	5.59	5.50	5.84	0.71	0.79	1.33	1.18
Machinery and Equipment	55.19	57.69	54.54	65.28	71.90	8.69	9.55	15.32	13.08
Capital Costs ($71)	15.76	15.63	14.23	15.96	16.86	1.96	2.06	3.20	2.60
Nonresidential Structures	1.64	1.61	1.57	1.47	1.51	0.18	0.19	0.30	0.26
Machinery and Equipment	14.12	14.02	12.66	14.48	15.36	1.78	1.87	2.89	2.34
ANNUAL CURRENT EXPENSES ($current)									
Total	22.02	44.80	65.77	90.63	118.25	124.40	132.08	140.59	150.17
Operating	13.87	28.60	43.23	60.70	79.87	84.66	90.33	97.31	104.67
Depreciation	8.15	16.21	22.53	29.92	38.38	39.74	41.74	43.28	45.51
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.55	1.11	1.43	1.79	2.21	2.21	2.23	2.24	2.24
2-Digit, Ontario	1.04	2.09	2.68	3.37	4.16	4.17	4.20	4.24	4.22

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SENES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.73	8.66	9.60	8.06	9.27	11.64	9.99	13.44
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	6.73	8.66	9.60	8.06	9.27	11.64	9.99	13.44
Capital Costs ($current)	11.08	15.04	17.56	15.58	18.88	25.13	22.82	32.49
Nonresidential Structures	0.90	1.16	1.32	1.15	1.45	1.91	1.70	2.42
Machinery and Equipment	10.18	13.87	16.25	14.43	17.43	23.22	21.12	30.07
Capital Costs ($71)	1.91	2.46	2.72	2.28	2.63	3.30	2.83	3.81
Nonresidential Structures	0.19	0.23	0.25	0.21	0.25	0.31	0.26	0.35
Machinery and Equipment	1.72	2.22	2.47	2.08	2.38	2.99	2.57	3.46
ANNUAL CURRENT EXPENSES ($current)								
Total	159.64	168.86	179.88	192.08	204.89	222.96	237.42	257.26
Operating	111.88	119.99	129.06	138.57	149.39	162.90	176.23	192.31
Depreciation	47.76	48.87	50.82	53.51	55.50	60.05	61.19	64.95
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	2.21	2.17	2.15	2.16	2.15	2.16	2.11	2.11
2-Digit, Ontario	4.18	4.08	4.00	3.98	3.93	3.94	3.84	3.82

POWER GENERATION
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($current)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($71)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)									
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Operating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-Digit, Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

POWER GENERATION
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($current)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital Costs ($71)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonresidential Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANNUAL CURRENT EXPENSES ($current)								
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Operating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-Digit, Ontario	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WASTE DISPOSAL, HOSPITAL COMPONENT
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	31.45	31.47	31.43	31.34	31.36	2.63	2.65	2.70	2.72
Change 1987 Capital Stock	27.92	27.92	27.92	27.92	27.92	0.00	0.00	0.00	0.00
Change 1988 Stock	0.83	0.83	0.83	0.83	0.83	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.70	2.72	2.69	2.59	2.62	2.63	2.65	2.70	2.72
Capital Costs ($current)	34.32	35.15	36.66	38.40	40.09	3.50	3.71	3.93	4.16
ANNUAL CURRENT EXPENSES ($current)									
Operating	2.09	4.32	6.75	9.35	12.06	12.68	13.42	14.14	15.01

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	2.84	2.91	2.96	3.00	3.04	3.07	3.16	3.27
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	2.84	2.91	2.96	3.00	3.04	3.07	3.16	3.27
Capital Costs ($current)	4.55	4.90	5.23	5.59	5.97	6.41	6.97	7.65
ANNUAL CURRENT EXPENSES ($current)								
Operating	15.97	16.96	18.02	19.22	20.52	22.03	23.59	25.28

WASTE DISPOSAL, MUNICIPAL COMPONENT
Capital, Operating and Monitoriing Expenses

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	3.24	3.24	3.25	3.26	3.28	0.41	0.42	0.43	0.43
Change 1987 Capital Stock	2.79	2.79	2.79	2.79	2.79	0.00	0.00	0.00	0.00
Change 1988 Stock	0.10	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.35	0.36	0.36	0.37	0.40	0.41	0.42	0.43	0.43
Capital Costs ($current)	3.55	3.66	3.77	3.91	4.05	0.52	0.55	0.58	0.61
ANNUAL CURRENT EXPENSES ($current)									
Operating	0.20	0.42	0.65	0.91	1.18	1.25	1.33	1.41	1.51

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.42	0.42	0.43	0.43	0.44	0.44	0.45	0.46
Change 1987 Capital Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.42	0.42	0.43	0.43	0.44	0.44	0.45	0.46
Capital Costs ($current)	0.61	0.65	0.68	0.72	0.75	0.80	0.85	0.91
ANNUAL CURRENT EXPENSES ($current)								
Operating	1.62	1.73	1.85	1.98	2.13	2.29	2.47	2.66

PROVINCIAL GOVERNMENT OPERATING EXPENSES AND TAXES
(in millions of dollars)

OME STUDY, SCEN-C, 08/15	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Total Expenditures, $86	16.90	16.91	16.92	16.93	16.94	0.61	0.62	0.63	0.65
Total Expenditures, $C	19.09	19.78	20.59	21.44	22.16	0.82	0.87	0.92	0.98
Total Expenditures, $71	5.33	5.33	5.34	5.34	5.34	0.19	0.20	0.20	0.20
of which:									
Labour	3.29	3.28	3.26	3.25	3.25	0.12	0.12	0.12	0.12
Goods and Services	2.04	2.05	2.07	2.09	2.09	0.07	0.08	0.08	0.08
Provincial Personal Tax Increa for Ministry and Hospitals	25.78	33.18	40.33	47.75	55.52	35.37	37.02	38.03	39.73

OME STUDY, SCEN-C, 08/15	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Total Expenditures, $86	0.66	18.65	18.70	18.75	18.80	18.84	2.55	2.60
Total Expenditures, $C	1.05	31.04	32.51	34.18	35.98	38.08	5.42	5.82
Total Expenditures, $71	0.21	5.88	5.90	5.91	5.93	5.94	0.80	0.82
of which:								
Labour	0.13	3.61	3.64	3.66	3.67	3.68	0.50	0.51
Goods and Services	0.08	2.27	2.26	2.26	2.26	2.27	0.31	0.31
Provincial Personal Tax Increa for Ministry and Hospitals	41.78	72.99	76.08	80.02	83.70	88.81	57.78	60.74

DIRECT ADDITIONS TO EMPLOYMENT FROM OPERATING EXPENSES
(in thousands)

OME STUDY, SCEN-C, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Food, Manufacturing	0.08	0.16	0.23	0.31	0.37	0.37	0.37	0.37	0.38
Food, Hospitality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp & Paper, Manufacturing	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Pulp & Paper, Printing	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Foundries, Non-ferrous, Steel	0.65	1.25	1.81	2.37	2.92	2.96	2.98	3.00	3.07
Automotive Industry	0.05	0.10	0.14	0.19	0.23	0.23	0.24	0.24	0.25
Petroleum Refining & Asphalt	0.06	0.12	0.18	0.23	0.28	0.28	0.28	0.27	0.28
Petrochemicals, Manufaturing	0.16	0.32	0.47	0.62	0.77	0.77	0.77	0.76	0.76
Petrochemicals, Dry Cleaning	0.01	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.04
Non-Metallic Minerals	0.29	0.57	0.82	1.08	1.35	1.36	1.37	1.41	1.44
Electric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hospitals	0.04	0.09	0.13	0.18	0.22	0.23	0.23	0.23	0.24
Waste Disposal	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Provincial Ministry	0.22	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01
Total, All Sectors	1.58	2.88	4.07	5.29	6.48	6.32	6.35	6.41	6.52

OME STUDY, SCEN-C, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
			Levels					
Open Pit Mines	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Food, Manufacturing	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.39
Food, Hospitality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp & Paper, Manufacturing	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Pulp & Paper, Printing	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Foundries, Non-ferrous, Steel	3.14	3.22	3.30	3.38	3.44	3.54	3.64	3.74
Automotive Industry	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.27
Petroleum Refining & Asphalt	0.27	0.27	0.27	0.27	0.28	0.28	0.28	0.29
Petrochemicals, Manufaturing	0.75	0.75	0.74	0.74	0.73	0.72	0.71	0.71
Petrochemicals, Dry Cleaning	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Non-Metallic Minerals	1.46	1.48	1.50	1.52	1.54	1.57	1.59	1.63
Electric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hospitals	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.26
Waste Disposal	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Provincial Ministry	0.01	0.24	0.24	0.24	0.24	0.24	0.03	0.03
Total, All Sectors	6.61	6.94	7.06	7.17	7.24	7.37	7.30	7.45

OPERATING EXPENSES AS SHARE OF GDP IN
SENES TARGETED INDUSTRIES
(in per cent)

OME STUDY, SCEN-C, 08/16	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.05	0.10	0.16	0.20	0.24	0.24	0.23	0.24	0.25
Food, Manufacturing	0.49	0.99	1.39	1.79	2.22	2.26	2.28	2.29	2.30
Food, Hospitality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp & Paper, Manufacturing	0.22	0.43	0.53	0.63	0.77	0.76	0.76	0.73	0.71
Pulp & Paper, Printing	0.07	0.14	0.19	0.23	0.29	0.29	0.29	0.30	0.30
Foundries	0.94	1.87	2.42	3.01	3.72	3.78	3.82	3.82	3.84
Non-ferrous Smelters	1.53	3.04	3.89	4.81	5.91	5.98	6.02	5.98	5.97
Iron & Steel Industry	1.08	2.15	2.79	3.48	4.30	4.37	4.42	4.42	4.44
Automotive Industry	0.20	0.39	0.49	0.59	0.71	0.72	0.73	0.73	0.73
Petroleum Refining	4.58	9.22	13.02	16.90	21.17	21.59	22.06	22.27	22.62
Asphalt	0.96	1.94	2.77	3.63	4.56	4.68	4.80	4.89	5.00
Petrochemicals, Manufaturing	1.45	2.82	3.80	4.73	5.68	5.54	5.42	5.24	5.06
Petrochemicals, Dry Cleaning	1.03	1.94	2.61	3.23	3.82	3.68	3.58	3.38	3.26
Non-Metallic Minerals	1.93	3.87	4.97	6.24	7.71	7.72	7.77	7.82	7.82
Electric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OME STUDY, SCEN-C, 08/16	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Open Pit Mines	0.26	0.26	0.27	0.27	0.28	0.30	0.30	0.32
Food, Manufacturing	2.31	2.29	2.30	2.32	2.32	2.34	2.32	2.32
Food, Hospitality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp & Paper, Manufacturing	0.69	0.66	0.63	0.63	0.60	0.58	0.54	0.52
Pulp & Paper, Printing	0.30	0.29	0.29	0.30	0.30	0.30	0.29	0.29
Foundries	3.89	3.88	3.91	4.00	4.02	4.08	4.12	4.17
Non-ferrous Smelters	6.01	5.96	5.97	6.07	6.07	6.13	6.13	6.17
Iron & Steel Industry	4.48	4.48	4.51	4.60	4.63	4.69	4.73	4.78
Automotive Industry	0.74	0.72	0.71	0.72	0.71	0.71	0.68	0.66
Petroleum Refining	22.95	22.88	23.20	24.06	24.52	25.42	25.80	26.62
Asphalt	5.09	5.13	5.25	5.49	5.65	5.90	6.07	6.34
Petrochemicals, Manufaturing	4.88	4.66	4.49	4.43	4.23	4.09	3.90	3.85
Petrochemicals, Dry Cleaning	3.14	2.96	2.82	2.73	2.58	2.49	2.31	2.19
Non-Metallic Minerals	7.72	7.56	7.50	7.52	7.50	7.53	7.37	7.38
Electric Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TOTAL, ALL INDUSTRIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	295.84	291.41	275.93	292.37	306.06	304.22	287.56	288.94	288.47
Change 1987 Capital Stock	210.91	210.91	210.91	210.91	210.91	210.91	210.91	210.91	210.91
Change 1988 Stock	7.11	7.11	7.11	7.11	7.11	7.11	7.11	7.11	7.11
Change 1989-2005 Stock	77.82	73.39	57.91	74.35	88.04	86.19	69.54	70.92	70.45
Capital Costs ($current)	317.42	323.88	318.30	351.51	380.24	390.80	384.54	401.35	420.45
Capital Costs ($71)	88.66	87.46	83.09	87.69	91.53	90.98	86.11	86.51	86.34
ANNUAL CURRENT EXPENSES ($current)									
Total	88.78	171.80	248.52	334.98	430.87	535.12	645.39	754.43	880.68
Operating	44.07	90.14	136.95	190.65	249.42	311.75	377.11	446.78	524.78
Depreciation	37.93	74.62	104.24	136.69	173.54	215.17	259.74	298.78	346.62
Ministry Expenditures	6.78	7.03	7.33	7.64	7.91	8.19	8.54	8.87	9.28
Current Expenses as % of Ontario GDP	0.04	0.07	0.10	0.13	0.15	0.18	0.20	0.22	0.24

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	286.58	301.86	309.17	317.10	286.00	306.61	167.92	189.19
Change 1987 Capital Stock	210.91	210.91	210.91	210.91	210.91	210.91	54.77	54.77
Change 1988 Stock	7.11	7.11	7.11	7.11	7.11	7.11	2.80	2.80
Change 1989-2005 Stock	68.56	83.84	91.15	99.08	67.98	88.59	110.36	131.62
Capital Costs ($current)	437.73	482.92	519.42	559.17	534.16	605.46	346.68	409.72
Capital Costs ($71)	85.70	90.14	92.41	94.92	85.76	91.72	50.85	57.18
ANNUAL CURRENT EXPENSES ($current)								
Total	1019.67	1171.03	1329.16	1514.43	1688.98	1915.20	2044.85	2201.83
Operating	609.55	703.10	806.32	922.06	1041.53	1183.52	1293.76	1419.16
Depreciation	400.38	445.96	499.80	568.12	621.90	704.61	722.48	764.63
Ministry Expenditures	9.73	21.97	23.04	24.25	25.55	27.07	28.61	18.04
Current Expenses as % of Ontario GDP	0.26	0.28	0.30	0.32	0.33	0.34	0.34	0.34

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	0.08	0.07	0.07	0.07	0.07	0.08	0.08	0.07	0.07
Change 1987 Capital Stock	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Capital Costs ($current)	0.09	0.08	0.08	0.08	0.09	0.11	0.11	0.11	0.11
Nonresidential Structures	0.07	0.07	0.06	0.06	0.07	0.08	0.08	0.08	0.09
Machinery and Equipment	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Capital Costs ($71)	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02
Nonresidential Structures	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Machinery and Equipment	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
ANNUAL CURRENT EXPENSES ($current)									
Total	0.44	0.88	1.33	1.80	2.32	2.92	3.57	4.23	4.97
Operating	0.43	0.86	1.30	1.76	2.27	2.86	3.50	4.15	4.87
Depreciation	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.10
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07
2-Digit, Ontario	0.87	1.66	2.31	2.96	3.58	4.18	4.75	5.50	6.25

OPEN PIT MINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	0.08	0.08	0.07	0.08	0.08	0.09	0.09	0.09
Change 1987 Capital Stock	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Change 1988 Stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Change 1989-2005 Stock	0.03	0.02	0.01	0.02	0.03	0.03	0.03	0.03
Capital Costs ($current)	0.13	0.13	0.12	0.14	0.16	0.18	0.19	0.20
Nonresidential Structures	0.10	0.10	0.10	0.11	0.13	0.14	0.15	0.16
Machinery and Equipment	0.03	0.02	0.02	0.03	0.03	0.04	0.04	0.04
Capital Costs ($71)	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.03
Nonresidential Structures	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Machinery and Equipment	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
ANNUAL CURRENT EXPENSES ($current)								
Total	5.84	6.72	7.60	8.65	9.86	11.28	12.79	14.44
Operating	5.72	6.59	7.45	8.48	9.67	11.07	12.56	14.19
Depreciation	0.12	0.13	0.15	0.17	0.18	0.21	0.23	0.25
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.08	0.08	0.09	0.10	0.11	0.13	0.14	0.15
2-Digit, Ontario	7.11	7.85	8.59	9.53	10.66	11.79	12.93	14.19

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	9.40	9.18	9.37	9.13	9.23	8.85	8.48	8.73	8.81
Change 1987 Capital Stock	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
Change 1988 Stock	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Change 1989-2005 Stock	2.24	2.03	2.22	1.97	2.07	1.69	1.32	1.58	1.66
Capital Costs ($current)	10.29	10.57	11.29	11.53	12.10	12.09	12.12	12.96	13.79
Nonresidential Structures	1.60	1.58	1.90	1.98	2.25	2.22	2.34	2.71	3.20
Machinery and Equipment	8.70	8.99	9.40	9.55	9.85	9.86	9.78	10.25	10.60
Capital Costs ($71)	2.97	2.90	2.96	2.88	2.92	2.79	2.68	2.76	2.79
Nonresidential Structures	0.47	0.46	0.53	0.53	0.58	0.55	0.56	0.62	0.70
Machinery and Equipment	2.49	2.44	2.43	2.35	2.33	2.24	2.12	2.14	2.09
ANNUAL CURRENT EXPENSES ($current)									
Total	3.27	6.60	9.99	13.48	17.22	21.16	25.41	29.70	34.69
Operating	1.89	3.87	6.06	8.36	10.78	13.28	15.94	18.79	22.01
Depreciation	1.38	2.73	3.94	5.13	6.44	7.89	9.48	10.90	12.67
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.02	0.05	0.07	0.08	0.10	0.12	0.14	0.16	0.18
2-Digit, Ontario	0.05	0.11	0.15	0.19	0.23	0.28	0.32	0.36	0.40

THE FOOD INDUSTRY, MANUFACTURING COMPONENT
Capital, Operating and Monitoriing Expenses

OME STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	8.78	9.23	9.33	9.04	9.22	9.56	3.45	3.44
Change 1987 Capital Stock	6.94	6.94	6.94	6.94	6.94	6.94	1.21	1.21
Change 1988 Stock	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.04
Change 1989-2005 Stock	1.62	2.07	2.17	1.88	2.07	2.40	2.21	2.20
Capital Costs ($current)	14.49	16.07	17.12	17.58	18.95	20.87	8.00	8.46
Nonresidential Structures	3.65	4.13	4.38	4.46	4.74	5.05	1.86	2.01
Machinery and Equipment	10.83	11.94	12.75	13.12	14.21	15.81	6.14	6.45
Capital Costs ($71)	2.78	2.92	2.95	2.86	2.92	3.03	1.09	1.09
Nonresidential Structures	0.76	0.82	0.83	0.80	0.81	0.81	0.28	0.29
Machinery and Equipment	2.02	2.10	2.12	2.06	2.11	2.21	0.81	0.80
ANNUAL CURRENT EXPENSES ($current)								
Total	40.20	45.77	51.96	58.95	66.17	75.19	79.36	84.52
Operating	25.52	29.38	33.59	38.15	43.20	49.04	52.95	57.16
Depreciation	14.68	16.39	18.38	20.80	22.97	26.14	26.41	27.36
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.20	0.21	0.23	0.25	0.26	0.28	0.27	0.27
2-Digit, Ontario	0.44	0.48	0.51	0.55	0.59	0.62	0.62	0.62

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	1.22	1.21	1.18	1.18	1.21	1.27	1.32	1.34	1.35
Change 1987 Capital Stock	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Change 1988 Stock	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Change 1989-2005 Stock	0.37	0.36	0.33	0.33	0.36	0.42	0.47	0.49	0.50
Capital Costs ($current)	1.24	1.24	1.23	1.26	1.33	1.43	1.53	1.58	1.63
Nonresidential Structures	0.16	0.11	0.09	0.09	0.11	0.14	0.14	0.13	0.12
Machinery and Equipment	1.08	1.13	1.15	1.17	1.23	1.29	1.39	1.45	1.51
Capital Costs ($71)	0.51	0.50	0.49	0.49	0.51	0.53	0.55	0.56	0.56
Nonresidential Structures	0.05	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.03
Machinery and Equipment	0.46	0.47	0.47	0.46	0.48	0.49	0.52	0.53	0.54
ANNUAL CURRENT EXPENSES ($current)									
Total	0.28	0.57	0.83	1.10	1.40	1.74	2.13	2.51	2.95
Operating	0.12	0.24	0.38	0.52	0.67	0.84	1.03	1.24	1.47
Depreciation	0.17	0.32	0.45	0.58	0.73	0.90	1.10	1.27	1.48
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
2-Digit, Ontario	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03

THE FOOD INDUSTRY, HOSPITALITY COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	1.35	1.42	1.48	1.57	1.62	1.63	1.67	1.73
Change 1987 Capital Stock	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Change 1988 Stock	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Change 1989-2005 Stock	0.50	0.57	0.63	0.72	0.77	0.78	0.82	0.89
Capital Costs ($current)	1.68	1.82	1.96	2.13	2.28	2.38	2.51	2.69
Nonresidential Structures	0.11	0.12	0.13	0.13	0.15	0.17	0.17	0.17
Machinery and Equipment	1.57	1.70	1.83	2.00	2.13	2.21	2.34	2.52
Capital Costs ($71)	0.57	0.60	0.62	0.66	0.68	0.69	0.71	0.74
Nonresidential Structures	0.02	0.02	0.03	0.02	0.03	0.03	0.03	0.03
Machinery and Equipment	0.54	0.57	0.60	0.63	0.66	0.66	0.68	0.71
ANNUAL CURRENT EXPENSES ($current)								
Total	3.44	3.91	4.45	5.09	5.75	6.57	7.28	8.14
Operating	1.72	2.00	2.31	2.67	3.06	3.52	4.01	4.55
Depreciation	1.72	1.91	2.14	2.43	2.69	3.05	3.27	3.59
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit,National	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
2-Digit, Ontario	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	8.51	8.49	8.29	8.28	8.54	8.73	8.62	8.65	8.40
Change 1987 Capital Stock	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45
Change 1988 Stock	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Change 1989-2005 Stock	0.80	0.78	0.58	0.57	0.84	1.02	0.92	0.94	0.69
Capital Costs ($current)	8.98	9.21	9.27	9.57	10.13	10.64	10.87	11.22	11.35
Nonresidential Structures	1.61	1.86	2.04	2.15	2.50	2.89	3.09	3.31	3.36
Machinery and Equipment	7.38	7.36	7.24	7.42	7.63	7.75	7.78	7.91	7.99
Capital Costs ($71)	2.38	2.38	2.32	2.32	2.39	2.44	2.41	2.42	2.35
Nonresidential Structures	0.48	0.55	0.58	0.58	0.65	0.72	0.74	0.76	0.74
Machinery and Equipment	1.90	1.83	1.75	1.74	1.74	1.72	1.67	1.66	1.61
ANNUAL CURRENT EXPENSES ($current)									
Total	1.32	2.62	3.74	4.87	6.11	7.55	9.15	10.58	12.25
Operating	0.12	0.24	0.38	0.52	0.67	0.84	1.02	1.21	1.42
Depreciation	1.21	2.38	3.36	4.35	5.44	6.72	8.14	9.37	10.83
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.07
2-Digit, Ontario	0.03	0.06	0.08	0.09	0.12	0.14	0.16	0.18	0.20

PULP AND PAPER AND ALLIED PRODUCTS, MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	8.44	8.57	8.55	8.47	8.13	8.40	3.45	3.45
Change 1987 Capital Stock	7.45	7.45	7.45	7.45	7.45	7.45	2.29	2.29
Change 1988 Stock	0.26	0.26	0.26	0.26	0.26	0.26	0.08	0.08
Change 1989-2005 Stock	0.73	0.86	0.84	0.76	0.42	0.69	1.09	1.09
Capital Costs ($current)	11.89	12.58	13.08	13.54	13.56	14.69	6.32	6.63
Nonresidential Structures	3.49	3.68	3.78	3.91	3.95	4.28	1.84	1.91
Machinery and Equipment	8.40	8.90	9.30	9.63	9.61	10.41	4.49	4.72
Capital Costs ($71)	2.36	2.39	2.39	2.36	2.27	2.34	0.96	0.96
Nonresidential Structures	0.73	0.74	0.72	0.71	0.68	0.69	0.28	0.28
Machinery and Equipment	1.62	1.66	1.67	1.66	1.59	1.65	0.68	0.69
ANNUAL CURRENT EXPENSES ($current)								
Total	14.14	15.71	17.49	19.66	21.52	24.18	24.63	25.66
Operating	1.65	1.90	2.16	2.46	2.77	3.13	3.38	3.66
Depreciation	12.49	13.81	15.33	17.21	18.75	21.05	21.25	22.00
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.07	0.08	0.08	0.09	0.09	0.10	0.09	0.09
2-Digit, Ontario	0.21	0.23	0.24	0.26	0.27	0.28	0.27	0.26

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	9.23	9.34	9.55	9.60	9.62	10.19	9.61	10.20	10.09
Change 1987 Capital Stock	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76	5.76
Change 1988 Stock	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Change 1989-2005 Stock	3.26	3.38	3.58	3.63	3.65	4.22	3.64	4.23	4.12
Capital Costs ($current)	9.89	10.35	10.95	11.41	11.79	12.89	12.58	13.79	14.18
Nonresidential Structures	1.13	1.20	1.33	1.43	1.48	1.63	1.57	1.69	1.67
Machinery and Equipment	8.75	9.16	9.62	9.98	10.30	11.26	11.02	12.10	12.50
Capital Costs ($71)	2.92	2.96	3.02	3.04	3.05	3.23	3.04	3.23	3.19
Nonresidential Structures	0.33	0.35	0.37	0.38	0.38	0.40	0.37	0.38	0.36
Machinery and Equipment	2.59	2.61	2.65	2.66	2.66	2.82	2.67	2.84	2.83
ANNUAL CURRENT EXPENSES ($current)									
Total	2.26	4.59	6.87	9.27	11.80	14.76	17.90	21.06	24.69
Operating	0.93	1.94	3.06	4.26	5.53	6.95	8.43	10.07	11.89
Depreciation	1.33	2.65	3.82	5.00	6.28	7.82	9.46	10.98	12.80
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.03	0.07	0.09	0.11	0.14	0.17	0.19	0.22	0.24
2-Digit, Ontario	0.06	0.13	0.17	0.22	0.27	0.32	0.37	0.41	0.46

PULP AND PAPER AND ALLIED PRODUCTS, PRINTING AND PUBLISHING COMPONENT

Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	10.14	10.15	10.34	10.87	10.94	11.15	10.05	10.48
Change 1987 Capital Stock	5.76	5.76	5.76	5.76	5.76	5.76	4.75	4.75
Change 1988 Stock	0.21	0.21	0.21	0.21	0.21	0.21	0.18	0.18
Change 1989-2005 Stock	4.17	4.18	4.37	4.90	4.97	5.18	5.12	5.56
Capital Costs ($current)	14.83	15.43	16.33	17.87	18.70	19.89	18.67	20.30
Nonresidential Structures	1.68	1.71	1.78	1.89	1.94	2.01	1.84	1.97
Machinery and Equipment	13.15	13.72	14.55	15.98	16.76	17.88	16.83	18.33
Capital Costs ($71)	3.21	3.22	3.28	3.44	3.46	3.53	3.19	3.33
Nonresidential Structures	0.35	0.34	0.34	0.34	0.33	0.32	0.28	0.28
Machinery and Equipment	2.86	2.88	2.94	3.10	3.13	3.21	2.90	3.04
ANNUAL CURRENT EXPENSES ($current)								
Total	28.74	32.49	36.71	41.82	46.88	53.28	58.18	64.29
Operating	13.88	16.00	18.33	20.99	23.90	27.25	30.60	34.34
Depreciation	14.85	16.48	18.38	20.83	22.97	26.03	27.57	29.95
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.26	0.28	0.30	0.32	0.34	0.36	0.36	0.37
2-Digit, Ontario	0.50	0.53	0.56	0.61	0.64	0.68	0.69	0.71

FOUNDRIES

Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	15.36	14.34	12.43	13.86	15.58	15.63	14.17	14.28	15.75
Change 1987 Capital Stock	9.67	9.67	9.67	9.67	9.67	9.67	9.67	9.67	9.67
Change 1988 Stock	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Change 1989-2005 Stock	5.38	4.36	2.45	3.88	5.60	5.66	4.19	4.31	5.77
Capital Costs ($current)	16.22	15.70	14.18	16.48	19.16	19.90	18.79	19.65	22.77
Nonresidential Structures	2.97	3.41	2.95	3.40	4.03	4.57	4.34	4.42	5.04
Machinery and Equipment	13.25	12.29	11.23	13.08	15.14	15.33	14.45	15.24	17.73
Capital Costs ($71)	4.33	4.05	3.51	3.91	4.40	4.42	4.00	4.03	4.45
Nonresidential Structures	0.87	0.99	0.83	0.91	1.04	1.13	1.03	1.01	1.10
Machinery and Equipment	3.46	3.06	2.69	3.01	3.36	3.29	2.97	3.03	3.35
ANNUAL CURRENT EXPENSES ($current)									
Total	6.10	12.04	17.25	23.40	30.62	38.51	46.56	54.64	64.66
Operating	3.93	7.86	11.61	16.05	21.19	26.70	32.29	38.21	45.32
Depreciation	2.18	4.17	5.64	7.35	9.43	11.81	14.27	16.43	19.34
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.07	0.13	0.17	0.21	0.26	0.31	0.36	0.40	0.45
2-Digit, Ontario	0.12	0.25	0.30	0.37	0.46	0.56	0.64	0.72	0.79

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FOUNDRIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	16.74	18.17	18.31	17.98	17.00	19.48	11.60	11.54
Change 1987 Capital Stock	9.67	9.67	9.67	9.67	9.67	9.67	0.48	0.48
Change 1988 Stock	0.31	0.31	0.31	0.31	0.31	0.31	0.02	0.02
Change 1989-2005 Stock	6.76	8.19	8.33	8.00	7.02	9.50	11.10	11.04
Capital Costs ($current)	25.43	28.94	30.60	31.61	31.40	38.03	23.87	25.07
Nonresidential Structures	5.69	6.57	6.86	7.16	7.03	8.41	5.21	5.32
Machinery and Equipment	19.75	22.37	23.74	24.44	24.37	29.62	18.66	19.76
Capital Costs ($71)	4.73	5.13	5.17	5.08	4.80	5.50	3.27	3.26
Nonresidential Structures	1.18	1.30	1.30	1.29	1.20	1.35	0.79	0.76
Machinery and Equipment	3.55	3.83	3.88	3.79	3.60	4.15	2.48	2.49
ANNUAL CURRENT EXPENSES ($current)								
Total	76.26	88.59	102.19	117.43	132.57	152.46	165.57	180.80
Operating	53.46	62.66	72.69	83.64	95.18	109.40	120.79	133.12
Depreciation	22.80	25.93	29.50	33.79	37.39	43.06	44.78	47.68
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.49	0.53	0.58	0.62	0.66	0.70	0.71	0.72
2-Digit, Ontario	0.87	0.94	1.02	1.10	1.17	1.24	1.25	1.27

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	21.57	20.55	18.65	20.07	21.79	21.84	20.38	20.50	21.96
Change 1987 Capital Stock	15.70	15.70	15.70	15.70	15.70	15.70	15.70	15.70	15.70
Change 1988 Stock	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Change 1989-2005 Stock	5.37	4.35	2.45	3.87	5.59	5.65	4.18	4.30	5.76
Capital Costs ($current)	22.78	22.50	21.27	23.86	26.80	27.80	27.03	28.20	31.75
Nonresidential Structures	4.17	4.88	4.43	4.92	5.63	6.38	6.24	6.34	7.03
Machinery and Equipment	18.60	17.61	16.84	18.94	21.17	21.42	20.79	21.86	24.73
Capital Costs ($71)	6.08	5.81	5.27	5.67	6.15	6.17	5.75	5.79	6.20
Nonresidential Structures	1.23	1.42	1.24	1.32	1.45	1.58	1.48	1.44	1.53
Machinery and Equipment	4.85	4.39	4.03	4.35	4.70	4.59	4.28	4.34	4.67
ANNUAL CURRENT EXPENSES ($current)									
Total	5.98	11.84	17.04	22.92	29.66	37.09	44.89	52.49	61.85
Operating	2.93	5.92	8.89	12.31	16.14	20.24	24.50	29.01	34.31
Depreciation	3.06	5.92	8.14	10.61	13.52	16.85	20.38	23.49	27.55
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.07	0.13	0.16	0.20	0.25	0.30	0.34	0.38	0.43
2-Digit, Ontario	0.12	0.24	0.30	0.36	0.45	0.54	0.62	0.69	0.76

NON-FERROUS SMELTERS AND REFINERIES
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	22.95	24.37	24.52	24.19	23.21	25.68	11.40	11.34
Change 1987 Capital Stock	15.70	15.70	15.70	15.70	15.70	15.70	0.30	0.30
Change 1988 Stock	0.50	0.50	0.50	0.50	0.50	0.50	0.01	0.01
Change 1989-2005 Stock	6.75	8.18	8.32	7.99	7.01	9.49	11.09	11.03
Capital Costs ($current)	34.86	38.82	40.98	42.52	42.87	50.14	23.46	24.64
Nonresidential Structures	7.80	8.81	9.19	9.63	9.60	11.08	5.12	5.22
Machinery and Equipment	27.07	30.01	31.79	32.88	33.27	39.05	18.33	19.41
Capital Costs ($71)	6.48	6.89	6.93	6.83	6.55	7.25	3.22	3.20
Nonresidential Structures	1.62	1.75	1.74	1.73	1.64	1.78	0.78	0.75
Machinery and Equipment	4.86	5.14	5.19	5.10	4.92	5.47	2.44	2.45
ANNUAL CURRENT EXPENSES ($current)								
Total	72.61	83.44	95.44	109.17	122.53	140.24	148.67	159.25
Operating	40.29	46.95	54.18	62.12	70.56	80.73	87.93	95.69
Depreciation	32.32	36.49	41.26	47.05	51.97	59.51	60.74	63.56
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.47	0.50	0.54	0.58	0.61	0.65	0.64	0.63
2-Digit, Ontario	0.83	0.89	0.95	1.03	1.08	1.14	1.13	1.11

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	50.48	47.30	41.36	45.80	51.18	51.36	46.76	47.14	51.72
Change 1987 Capital Stock	32.65	32.65	32.65	32.65	32.65	32.65	32.65	32.65	32.65
Change 1988 Stock	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Change 1989-2005 Stock	16.79	13.61	7.67	12.11	17.49	17.67	13.08	13.45	18.03
Capital Costs ($current)	53.32	51.79	47.18	54.46	62.95	65.35	62.03	64.86	74.78
Nonresidential Structures	9.77	11.24	9.82	11.24	13.23	15.00	14.31	14.58	16.55
Machinery and Equipment	43.55	40.54	37.36	43.23	49.72	50.35	47.72	50.27	58.23
Capital Costs ($71)	14.24	13.36	11.69	12.94	14.46	14.51	13.21	13.31	14.61
Nonresidential Structures	2.88	3.26	2.75	3.00	3.41	3.71	3.39	3.32	3.60
Machinery and Equipment	11.36	10.10	8.94	9.93	11.05	10.79	9.82	9.99	11.00
ANNUAL CURRENT EXPENSES ($current)									
Total	15.25	29.98	42.68	57.52	74.97	94.14	113.82	133.20	157.41
Operating	8.10	16.24	24.05	33.25	43.85	55.21	66.78	79.01	93.68
Depreciation	7.15	13.74	18.64	24.27	31.12	38.93	47.04	54.18	63.73
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.17	0.33	0.41	0.50	0.63	0.76	0.87	0.98	1.08
2-Digit, Ontario	0.31	0.61	0.74	0.91	1.13	1.36	1.57	1.75	1.93

IRON AND STEEL INDUSTRY
Capital, Operating And Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	54.81	59.27	59.73	58.68	55.63	63.37	34.92	34.74
Change 1987 Capital Stock	32.65	32.65	32.65	32.65	32.65	32.65	0.23	0.23
Change 1988 Stock	1.03	1.03	1.03	1.03	1.03	1.03	0.01	0.01
Change 1989-2005 Stock	21.12	25.58	26.04	25.00	21.94	29.68	34.69	34.50
Capital Costs ($current)	83.27	94.40	99.81	103.15	102.75	123.70	71.88	75.48
Nonresidential Structures	18.62	21.42	22.38	23.37	23.01	27.34	15.70	16.00
Machinery and Equipment	64.65	72.98	77.43	79.78	79.73	96.35	56.18	59.47
Capital Costs ($71)	15.48	16.74	16.87	16.58	15.71	17.89	9.86	9.80
Nonresidential Structures	3.87	4.24	4.23	4.20	3.92	4.40	2.39	2.30
Machinery and Equipment	11.61	12.50	12.64	12.38	11.79	13.49	7.47	7.51
ANNUAL CURRENT EXPENSES ($current)								
Total	185.50	214.57	246.76	283.24	318.74	366.32	393.67	426.72
Operating	110.42	129.29	149.85	172.32	196.03	225.14	247.63	271.95
Depreciation	75.08	85.28	96.91	110.92	122.71	141.17	146.04	154.76
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.20	1.29	1.39	1.51	1.59	1.69	1.69	1.69
2-Digit, Ontario	2.12	2.28	2.45	2.67	2.82	2.99	2.98	2.99

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	18.39	17.08	16.92	16.16	15.59	14.36	14.65	14.48	14.88
Change 1987 Capital Stock	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74
Change 1988 Stock	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Change 1989-2005 Stock	10.46	9.16	9.00	8.24	7.67	6.44	6.73	6.56	6.96
Capital Costs ($current)	20.15	19.70	20.45	20.51	20.49	19.66	21.10	21.79	23.77
Nonresidential Structures	2.03	2.21	2.31	2.02	2.81	2.90	2.40	1.98	1.71
Machinery and Equipment	18.12	17.49	18.13	18.50	17.68	16.77	18.70	19.80	22.07
Capital Costs ($71)	5.73	5.32	5.28	5.04	4.86	4.48	4.57	4.51	4.64
Nonresidential Structures	0.60	0.65	0.65	0.54	0.73	0.72	0.57	0.46	0.38
Machinery and Equipment	5.12	4.67	4.62	4.49	4.13	3.76	3.99	4.06	4.26
ANNUAL CURRENT EXPENSES ($current)									
Total	6.13	12.06	17.91	23.82	29.87	36.06	43.13	49.98	58.14
Operating	3.43	6.85	10.53	14.34	18.18	22.01	26.30	30.76	35.86
Depreciation	2.70	5.21	7.38	9.49	11.69	14.05	16.83	19.22	22.28
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.05	0.09	0.11	0.13	0.16	0.18	0.21	0.23	0.25
2-Digit, Ontario	0.06	0.11	0.13	0.16	0.19	0.22	0.25	0.27	0.30

THE AUTOMOTIVE INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	14.08	12.96	14.13	14.16	13.53	12.72	11.41	11.48
Change 1987 Capital Stock	6.74	6.74	6.74	6.74	6.74	6.74	5.82	5.82
Change 1988 Stock	1.18	1.18	1.18	1.18	1.18	1.18	1.02	1.02
Change 1989-2005 Stock	6.16	5.04	6.21	6.24	5.60	4.80	4.58	4.65
Capital Costs ($current)	23.87	23.25	26.86	28.58	28.91	29.09	27.81	29.79
Nonresidential Structures	1.64	1.65	1.67	1.71	1.72	1.07	0.67	0.50
Machinery and Equipment	22.23	21.59	25.19	26.86	27.19	28.02	27.14	29.29
Capital Costs ($71)	4.39	4.04	4.41	4.42	4.22	3.97	3.56	3.58
Nonresidential Structures	0.34	0.33	0.32	0.31	0.30	0.17	0.10	0.07
Machinery and Equipment	4.05	3.71	4.09	4.11	3.92	3.79	3.45	3.51
ANNUAL CURRENT EXPENSES ($current)								
Total	66.84	74.63	83.90	94.68	105.22	117.79	127.96	140.11
Operating	41.23	46.61	52.76	59.59	66.84	74.81	82.79	91.48
Depreciation	25.61	28.02	31.13	35.08	38.38	42.97	45.17	48.64
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.27	0.28	0.29	0.31	0.33	0.34	0.34	0.34
2-Digit, Ontario	0.32	0.33	0.35	0.37	0.39	0.40	0.40	0.41

PETROLEUM REFINING

Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	21.16	19.51	20.00	19.18	18.04	17.78	16.48	18.38	18.66
Change 1987 Capital Stock	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73
Change 1988 Stock	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Change 1989-2005 Stock	5.07	3.42	3.91	3.09	1.95	1.69	0.39	2.28	2.57
Capital Costs ($current)	23.30	22.42	23.79	24.00	23.60	24.24	23.49	27.68	29.88
Nonresidential Structures	18.09	16.19	17.96	18.09	17.58	18.25	18.01	19.89	20.34
Machinery and Equipment	5.21	6.23	5.83	5.91	6.03	5.99	5.48	7.78	9.54
Capital Costs ($71)	6.80	6.30	6.45	6.19	5.82	5.73	5.31	5.93	6.03
Nonresidential Structures	5.54	4.87	5.18	4.96	4.61	4.58	4.30	4.55	4.43
Machinery and Equipment	1.26	1.43	1.28	1.23	1.21	1.15	1.01	1.37	1.59
ANNUAL CURRENT EXPENSES ($current)									
Total	7.13	13.95	20.88	27.92	34.97	42.65	50.69	59.39	69.60
Operating	4.01	7.97	12.38	16.95	21.46	26.22	31.17	36.81	43.20
Depreciation	3.13	5.98	8.51	10.98	13.51	16.42	19.53	22.58	26.41
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.29	0.58	0.82	1.06	1.32	1.60	1.88	2.17	2.49
2-Digit, Ontario	0.67	1.32	1.85	2.37	2.91	3.49	4.09	4.71	5.36

PETROLEUM REFINING
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	16.64	17.19	19.74	21.90	21.20	22.89	11.38	12.31
Change 1987 Capital Stock	15.73	15.73	15.73	15.73	15.73	15.73	2.56	2.56
Change 1988 Stock	0.36	0.36	0.36	0.36	0.36	0.36	0.06	0.06
Change 1989-2005 Stock	0.55	1.10	3.65	5.80	5.10	6.79	8.77	9.70
Capital Costs ($current)	28.46	31.31	38.18	45.19	46.65	53.99	28.69	32.98
Nonresidential Structures	18.02	18.50	21.36	23.53	22.75	24.60	12.33	13.97
Machinery and Equipment	10.43	12.81	16.82	21.66	23.90	29.40	16.36	19.01
Capital Costs ($71)	5.39	5.57	6.40	7.11	6.88	7.43	3.69	4.00
Nonresidential Structures	3.74	3.65	4.01	4.20	3.84	3.91	1.85	1.97
Machinery and Equipment	1.65	1.92	2.39	2.91	3.04	3.52	1.84	2.02
ANNUAL CURRENT EXPENSES ($current)								
Total	80.02	90.30	103.05	118.96	134.87	155.34	166.49	180.67
Operating	49.64	56.62	64.92	74.77	85.29	97.80	107.04	117.40
Depreciation	30.38	33.68	38.13	44.20	49.58	57.54	59.45	63.27
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	2.80	3.08	3.42	3.86	4.25	4.72	4.84	5.03
2-Digit, Ontario	5.99	6.55	7.25	8.14	8.91	9.83	10.02	10.36

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	1.45	1.33	1.36	1.30	1.21	1.19	1.09	1.24	1.26
Change 1987 Capital Stock	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Change 1988 Stock	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Change 1989-2005 Stock	0.39	0.26	0.30	0.24	0.15	0.13	0.03	0.17	0.20
Capital Costs ($current)	1.60	1.52	1.62	1.63	1.59	1.63	1.56	1.86	2.02
Nonresidential Structures	1.24	1.10	1.22	1.23	1.18	1.22	1.19	1.34	1.37
Machinery and Equipment	0.36	0.42	0.40	0.40	0.41	0.40	0.36	0.52	0.64
Capital Costs ($71)	0.47	0.43	0.44	0.42	0.39	0.38	0.35	0.40	0.41
Nonresidential Structures	0.38	0.33	0.35	0.34	0.31	0.31	0.29	0.31	0.30
Machinery and Equipment	0.09	0.10	0.09	0.08	0.08	0.08	0.07	0.09	0.11
ANNUAL CURRENT EXPENSES ($current)									
Total	0.53	1.03	1.55	2.07	2.59	3.15	3.74	4.38	5.13
Operating	0.32	0.62	0.97	1.32	1.67	2.04	2.42	2.86	3.35
Depreciation	0.21	0.41	0.58	0.75	0.92	1.11	1.32	1.53	1.78
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
2-Digit, Ontario	0.05	0.10	0.14	0.18	0.22	0.26	0.30	0.35	0.40

THE ASPHALT PAVING INDUSTRY
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	1.11	1.15	1.34	1.51	1.45	1.58	0.67	0.74
Change 1987 Capital Stock	1.04	1.04	1.04	1.04	1.04	1.04	0.00	0.00
Change 1988 Stock	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00
Change 1989-2005 Stock	0.04	0.08	0.28	0.44	0.39	0.52	0.67	0.74
Capital Costs ($current)	1.89	2.09	2.60	3.11	3.20	3.73	1.69	1.99
Nonresidential Structures	1.20	1.23	1.45	1.62	1.56	1.70	0.73	0.84
Machinery and Equipment	0.69	0.85	1.14	1.49	1.64	2.03	0.96	1.14
Capital Costs ($71)	0.36	0.37	0.44	0.49	0.47	0.51	0.22	0.24
Nonresidential Structures	0.25	0.24	0.27	0.29	0.26	0.27	0.11	0.12
Machinery and Equipment	0.11	0.13	0.16	0.20	0.21	0.24	0.11	0.12
ANNUAL CURRENT EXPENSES ($current)								
Total	5.89	6.65	7.60	8.79	9.98	11.51	12.29	13.28
Operating	3.84	4.38	5.03	5.80	6.62	7.61	8.28	9.05
Depreciation	2.05	2.27	2.57	2.99	3.36	3.91	4.00	4.23
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.21	0.23	0.25	0.29	0.31	0.35	0.36	0.37
2-Digit, Ontario	0.44	0.48	0.53	0.60	0.66	0.73	0.74	0.76

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	76.61	81.22	81.35	84.51	86.36	85.95	78.10	70.80	64.85
Change 1987 Capital Stock	60.60	60.60	60.60	60.60	60.60	60.60	60.60	60.60	60.60
Change 1988 Stock	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Change 1989-2005 Stock	14.93	19.54	19.67	22.82	24.67	24.26	16.42	9.12	3.16
Capital Costs ($current)	82.07	89.63	92.73	99.83	104.81	107.30	100.69	93.89	89.38
Nonresidential Structures	16.42	18.41	19.45	19.63	19.45	19.40	18.94	18.63	18.86
Machinery and Equipment	65.65	71.22	73.29	80.20	85.36	87.90	81.75	75.26	70.52
Capital Costs ($71)	22.73	24.11	24.14	25.07	25.60	25.47	23.14	20.98	19.21
Nonresidential Structures	4.92	5.43	5.52	5.31	5.06	4.85	4.53	4.28	4.13
Machinery and Equipment	17.81	18.68	18.63	19.75	20.54	20.62	18.61	16.70	15.08
ANNUAL CURRENT EXPENSES ($current)									
Total	20.64	42.99	64.76	88.37	113.80	141.62	170.10	195.14	222.47
Operating	9.63	20.54	32.40	45.61	59.67	74.65	89.89	104.71	120.31
Depreciation	11.01	22.45	32.36	42.76	54.13	66.97	80.21	90.43	102.16
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.28	0.55	0.76	0.96	1.16	1.36	1.53	1.66	1.78
2-Digit, Ontario	0.48	0.94	1.29	1.64	1.99	2.33	2.63	2.86	3.07

THE PETROCHEMICAL PRODUCTS INDUSTRY - MANUFACTURING COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	63.89	68.95	69.71	78.46	51.93	54.76	27.51	42.46
Change 1987 Capital Stock	60.60	60.60	60.60	60.60	60.60	60.60	20.92	20.92
Change 1988 Stock	1.09	1.09	1.09	1.09	1.09	1.09	0.37	0.37
Change 1989-2005 Stock	2.21	7.26	8.03	16.78	-9.76	-6.93	6.21	21.16
Capital Costs ($current)	91.63	102.81	108.11	126.95	87.66	96.96	51.09	82.56
Nonresidential Structures	20.93	24.86	26.58	31.66	22.96	27.28	15.41	23.89
Machinery and Equipment	70.69	77.95	81.53	95.29	64.70	69.68	35.68	58.67
Capital Costs ($71)	18.92	20.42	20.65	23.24	15.39	16.23	8.16	12.60
Nonresidential Structures	4.37	4.94	5.03	5.69	3.91	4.38	2.34	3.42
Machinery and Equipment	14.56	15.48	15.62	17.55	11.48	11.85	5.82	9.18
ANNUAL CURRENT EXPENSES ($current)								
Total	252.50	281.94	314.93	356.98	387.80	428.79	449.66	484.01
Operating	137.21	156.02	176.53	201.03	222.10	246.80	266.40	291.26
Depreciation	115.29	125.91	138.41	155.95	165.70	181.99	183.26	192.75
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.88	1.97	2.06	2.19	2.25	2.33	2.28	2.30
2-Digit, Ontario	3.26	3.42	3.58	3.83	3.93	4.08	4.00	4.05

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	6.36	6.35	6.30	6.29	6.33	6.40	6.47	6.48	6.48
Change 1987 Capital Stock	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19
Change 1988 Stock	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Change 1989-2005 Stock	0.56	0.55	0.50	0.49	0.53	0.60	0.66	0.68	0.68
Capital Costs ($current)	6.44	6.51	6.58	6.75	6.96	7.25	7.50	7.64	7.84
Nonresidential Structures	0.82	0.59	0.47	0.49	0.56	0.71	0.69	0.62	0.56
Machinery and Equipment	5.62	5.92	6.11	6.25	6.40	6.54	6.81	7.02	7.28
Capital Costs ($71)	2.66	2.64	2.62	2.62	2.64	2.68	2.71	2.72	2.71
Nonresidential Structures	0.26	0.18	0.14	0.14	0.15	0.19	0.17	0.15	0.13
Machinery and Equipment	2.40	2.46	2.48	2.48	2.49	2.49	2.54	2.57	2.59
ANNUAL CURRENT EXPENSES ($current)									
Total	1.69	3.41	5.06	6.79	8.62	10.65	12.92	15.12	17.65
Operating	0.83	1.72	2.67	3.70	4.78	5.94	7.24	8.60	10.12
Depreciation	0.86	1.69	2.39	3.08	3.83	4.70	5.68	6.52	7.54
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit,National	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.10	0.11
2-Digit, Ontario	0.04	0.08	0.12	0.15	0.18	0.21	0.24	0.26	0.28

THE PETROCHEMICAL PRODUCTS INDUSTRY, DRY CLEANING COMPONENT
Capital, Operating and Monitoriing Expenses

OME STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	6.48	6.56	6.64	6.74	6.80	6.82	6.86	6.94
Change 1987 Capital Stock	5.19	5.19	5.19	5.19	5.19	5.19	5.19	5.19
Change 1988 Stock	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Change 1989-2005 Stock	0.68	0.76	0.84	0.94	1.00	1.02	1.06	1.14
Capital Costs ($current)	8.06	8.42	8.77	9.17	9.58	9.95	10.31	10.76
Nonresidential Structures	0.53	0.55	0.57	0.57	0.65	0.71	0.68	0.68
Machinery and Equipment	7.54	7.86	8.19	8.60	8.93	9.25	9.63	10.08
Capital Costs ($71)	2.71	2.75	2.79	2.83	2.87	2.88	2.90	2.94
Nonresidential Structures	0.11	0.11	0.11	0.11	0.11	0.17	0.11	0.10
Machinery and Equipment	2.60	2.64	2.67	2.73	2.75	2.76	2.80	2.84
ANNUAL CURRENT EXPENSES ($current)								
Total	20.44	23.10	26.06	29.51	32.99	37.27	41.01	45.44
Operating	11.78	13.56	15.50	17.68	20.06	22.78	25.67	28.84
Depreciation	8.66	9.54	10.56	11.84	12.93	14.49	15.34	16.60
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit,National	0.12	0.13	0.14	0.15	0.15	0.16	0.16	0.17
2-Digit, Ontario	0.31	0.33	0.35	0.37	0.38	0.40	0.41	0.42

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SERIES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	26.74	26.09	19.76	27.57	31.65	30.76	31.23	36.34	33.63
Change 1987 Capital Stock	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39
Change 1988 Stock	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Change 1989-2005 Stock	4.79	4.14	-2.19	5.62	9.70	8.82	9.28	14.39	11.68
Capital Costs ($current)	29.17	29.89	23.66	34.64	41.33	41.82	44.39	53.64	52.38
Nonresidential Structures	2.67	2.61	2.20	2.69	3.10	3.15	3.40	4.29	4.35
Machinery and Equipment	26.50	27.28	21.46	31.95	38.22	38.67	40.99	49.35	48.03
Capital Costs ($71)	7.57	7.39	5.60	7.81	8.96	8.71	8.85	10.29	9.53
Nonresidential Structures	0.79	0.76	0.62	0.72	0.80	0.78	0.81	0.98	0.95
Machinery and Equipment	6.78	6.63	4.98	7.09	8.16	7.93	8.04	9.32	8.58
ANNUAL CURRENT EXPENSES ($current)									
Total	9.55	19.26	26.62	37.46	50.50	64.36	79.93	97.72	116.70
Operating	5.64	11.54	16.50	23.68	32.19	41.06	50.92	62.70	75.03
Depreciation	3.91	7.72	10.12	13.78	18.31	23.30	29.01	35.02	41.67
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.24	0.48	0.58	0.74	0.94	1.14	1.35	1.56	1.74
2-Digit, Ontario	0.45	0.90	1.08	1.39	1.78	2.16	2.54	2.95	3.28

THE NON-METALLIC MINERALS MANUFACTURING INDUSTRY
SENES: INORGANIC CHEMICALS
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	30.53	33.00	34.20	32.22	33.77	36.79	14.16	18.56
Change 1987 Capital Stock	21.39	21.39	21.39	21.39	21.39	21.39	1.38	1.38
Change 1988 Stock	0.56	0.56	0.56	0.56	0.56	0.56	0.04	0.04
Change 1989-2005 Stock	8.59	11.05	12.25	10.28	11.82	14.85	12.75	17.15
Capital Costs ($current)	50.26	57.28	62.55	62.31	68.81	79.44	32.35	44.87
Nonresidential Structures	4.07	4.43	4.69	4.61	5.29	6.03	2.41	3.34
Machinery and Equipment	46.18	52.84	57.86	57.70	63.52	73.41	29.94	41.53
Capital Costs ($71)	8.65	9.35	9.69	9.13	9.57	10.43	4.01	5.26
Nonresidential Structures	0.85	0.88	0.89	0.83	0.90	0.97	0.37	0.48
Machinery and Equipment	7.81	8.47	8.81	8.31	8.67	9.46	3.65	4.78
ANNUAL CURRENT EXPENSES ($current)								
Total	136.18	156.43	179.39	204.58	231.25	265.50	281.89	305.02
Operating	87.59	101.71	117.38	134.06	152.81	175.21	190.13	208.08
Depreciation	48.58	54.73	62.01	70.53	78.44	90.29	91.77	96.94
CURRENT EXPENSES AS SHARE OF BASE CASE VALUE ADDED (Per Cent)								
2-Digit, National	1.89	2.01	2.14	2.30	2.43	2.57	2.51	2.51
2-Digit, Ontario	3.57	3.78	3.99	4.24	4.44	4.69	4.56	4.53

POWER GENERATION

Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	7.76	7.75	7.70	7.78	7.85	7.94	8.14	8.19	8.37
Change 1987 Capital Stock	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64
Change 1988 Stock	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Change 1989-2005 Stock	1.95	1.94	1.89	1.97	2.04	2.13	2.33	2.38	2.56
Capital Costs ($current)	8.33	8.54	8.81	9.27	9.68	10.15	10.84	11.28	12.12
Nonresidential Structures	4.10	3.98	3.98	4.12	4.24	4.48	4.73	4.84	5.08
Machinery and Equipment	4.23	4.56	4.84	5.15	5.44	5.66	6.11	6.44	7.04
Capital Costs ($71)	2.39	2.38	2.36	2.39	2.41	2.44	2.50	2.52	2.57
Nonresidential Structures	1.11	1.06	1.02	1.02	1.01	1.02	1.03	1.01	1.02
Machinery and Equipment	1.28	1.32	1.34	1.37	1.41	1.42	1.47	1.50	1.55
ANNUAL CURRENT EXPENSES ($current)									
Total	1.34	2.67	3.87	5.11	6.46	7.99	9.76	11.39	13.37
Operating	0.23	0.47	0.73	1.01	1.31	1.63	1.99	2.37	2.80
Depreciation	1.12	2.21	3.14	4.10	5.15	6.36	7.77	9.02	10.57
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)									
2-Digit, National	0.01	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.05
2-Digit, Ontario	0.02	0.05	0.07	0.08	0.10	0.12	0.15	0.16	0.18

POWER GENERATION
Capital, Operating and Monitoring Expenses

OME STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	8.37	8.49	8.67	8.75	8.97	9.08	9.34	9.73
Change 1987 Capital Stock	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64
Change 1988 Stock	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Change 1989-2005 Stock	2.56	2.68	2.86	2.94	3.16	3.27	3.53	3.92
Capital Costs ($current)	12.77	13.63	14.63	15.57	16.80	18.04	19.63	21.62
Nonresidential Structures	5.27	5.64	6.04	6.37	6.89	7.37	7.94	8.65
Machinery and Equipment	7.50	7.99	8.59	9.20	9.92	10.68	11.69	12.97
Capital Costs ($71)	2.57	2.61	2.66	2.69	2.75	2.79	2.87	2.99
Nonresidential Structures	1.01	1.03	1.05	1.05	1.08	1.09	1.11	1.14
Machinery and Equipment	1.56	1.58	1.61	1.64	1.68	1.70	1.76	1.85
ANNUAL CURRENT EXPENSES ($current)								
Total	15.60	17.56	19.82	22.57	25.19	28.71	31.33	34.82
Operating	3.27	3.78	4.34	4.96	5.65	6.44	7.29	8.24
Depreciation	12.33	13.78	15.48	17.61	19.54	22.27	24.04	26.57
CURRENT EXPENSES AS SHARE OF BASE-CASE VALUE ADDED (Per Cent)								
2-Digit, National	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
2-Digit, Ontario	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.26

WASTE DISPOSAL, HOSPITAL COMPONENT
Capital, Operating and Monitoring Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	11.93	11.96	11.92	11.83	11.85	11.86	11.89	11.93	11.96
Change 1987 Capital Stock	8.97	8.97	8.97	8.97	8.97	8.97	8.97	8.97	8.97
Change 1988 Stock	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Change 1989-2005 Stock	2.70	2.72	2.69	2.59	2.62	2.63	2.65	2.70	2.72
Capital Costs ($current)	13.02	13.36	13.90	14.49	15.15	15.81	16.60	17.36	18.25
ANNUAL CURRENT EXPENSES ($current)									
Operating	1.10	2.28	3.56	4.93	6.35	7.88	9.56	11.34	13.33

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
CAPITAL COSTS								
Total ($86)	12.07	12.14	12.19	12.23	12.27	12.31	4.20	4.32
Change 1987 Capital Stock	8.97	8.97	8.97	8.97	8.97	8.97	1.01	1.01
Change 1988 Stock	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03
Change 1989-2005 Stock	2.84	2.91	2.96	3.00	3.04	3.07	3.16	3.27
Capital Costs ($current)	19.37	20.45	21.56	22.80	24.14	25.66	9.27	10.09
ANNUAL CURRENT EXPENSES ($current)								
Operating	15.51	17.85	20.38	23.19	26.27	29.76	32.07	34.58

WASTE DISPOSAL, MUNICIPAL COMPONENT
Capital, Operating and Monitoriing Expenses

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
CAPITAL COSTS									
Total ($86)	9.60	9.65	9.71	9.78	9.95	10.02	10.10	10.18	10.24
Change 1987 Capital Stock	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63
Change 1988 Stock	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Change 1989-2005 Stock	2.73	2.78	2.84	2.91	3.08	3.16	3.23	3.31	3.37
Capital Costs ($current)	10.54	10.87	11.27	11.74	12.29	12.76	13.32	13.84	14.44
ANNUAL CURRENT EXPENSES ($current)									
Operating	0.46	0.96	1.51	2.10	2.73	3.40	4.15	4.94	5.82

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
					Levels			
CAPITAL COSTS								
Total ($86)	10.12	10.17	10.22	10.25	10.27	10.31	5.76	5.82
Change 1987 Capital Stock	6.63	6.63	6.63	6.63	6.63	6.63	2.19	2.19
Change 1988 Stock	0.24	0.24	0.24	0.24	0.24	0.24	0.08	0.08
Change 1989-2005 Stock	3.25	3.30	3.35	3.38	3.40	3.44	3.49	3.55
Capital Costs ($current)	14.85	15.50	16.19	16.95	17.74	18.71	10.95	11.59
ANNUAL CURRENT EXPENSES ($current)								
Operating	6.78	7.81	8.92	10.15	11.50	13.03	14.25	15.57

PROVINCIAL GOVERNMENT OPERATING EXPENSES AND TAXES
(in millions of dollars)

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Total Expenditures, $86	6.00	6.01	6.02	6.03	6.05	6.06	6.07	6.08	6.09
Total Expenditures, $C	6.78	7.03	7.33	7.64	7.91	8.19	8.54	8.87	9.28
Total Expenditures, $71	1.89	1.90	1.90	1.90	1.91	1.91	1.91	1.92	1.92
of which:									
Labour	1.17	1.17	1.16	1.16	1.16	1.17	1.17	1.17	1.18
Goods and Services	0.72	0.73	0.74	0.74	0.75	0.74	0.74	0.74	0.75
Provincial Personal Tax Increa for Ministry and Hospitals	9.62	12.76	15.82	18.99	22.33	26.03	30.23	34.25	38.99

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
					Levels			
Total Expenditures, $86	6.11	13.20	13.25	13.30	13.35	13.40	13.44	8.05
Total Expenditures, $C	9.73	21.97	23.04	24.25	25.55	27.07	28.61	18.04
Total Expenditures, $71	1.93	4.16	4.18	4.19	4.21	4.22	4.24	2.54
of which:								
Labour	1.18	2.56	2.58	2.59	2.60	2.61	2.63	1.58
Goods and Services	0.75	1.61	1.60	1.60	1.61	1.61	1.61	0.96
Provincial Personal Tax Increa for Ministry and Hospitals	44.30	61.04	67.14	74.29	81.43	90.39	94.46	87.53

DIRECT ADDITIONS TO EMPLOYMENT FROM OPERATING EXPENSES
(in thousands)

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06
Food, Manufacturing	0.03	0.06	0.09	0.12	0.14	0.17	0.19	0.21	0.24
Food, Hospitality	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04
Pulp & Paper, Manufacturing	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Pulp & Paper, Printing	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.07
Foundries, Non-ferrous, Steel	0.23	0.44	0.62	0.81	1.07	1.21	1.39	1.56	1.76
Automotive Industry	0.03	0.06	0.09	0.11	0.14	0.16	0.18	0.20	0.22
Petroleum Refining & Asphalt	0.05	0.09	0.13	0.16	0.20	0.23	0.25	0.29	0.32
Petrochemicals, Manufaturing	0.11	0.22	0.33	0.44	0.55	0.65	0.75	0.83	0.90
Petrochemicals, Dry Cleaning	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
Non-Metallic Minerals	0.11	0.22	0.29	0.40	0.51	0.62	0.72	0.85	0.96
Electric Power	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Hospitals	0.02	0.05	0.07	0.09	0.12	0.14	0.16	0.19	0.21
Waste Disposal	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07
Provincial Ministry	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Total, All Sectors	0.72	1.32	1.85	2.42	3.00	3.55	4.07	4.59	5.13

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Open Pit Mines	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.11
Food, Manufacturing	0.26	0.28	0.31	0.33	0.35	0.37	0.38	0.38
Food, Hospitality	0.04	0.05	0.05	0.06	0.07	0.07	0.08	0.08
Pulp & Paper, Manufacturing	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Pulp & Paper, Printing	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.12
Foundries, Non-ferrous, Steel	1.96	2.17	2.37	2.57	2.75	2.96	3.04	3.12
Automotive Industry	0.24	0.25	0.27	0.29	0.30	0.32	0.33	0.34
Petroleum Refining & Asphalt	0.35	0.38	0.41	0.44	0.47	0.51	0.52	0.53
Petrochemicals, Manufaturing	0.97	1.05	1.12	1.20	1.25	1.30	1.31	1.35
Petrochemicals, Dry Cleaning	0.20	0.22	0.24	0.26	0.28	0.29	0.31	0.33
Non-Metallic Minerals	1.07	1.17	1.28	1.38	1.47	1.58	1.61	1.65
Electric Power	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Hospitals	0.23	0.26	0.28	0.30	0.33	0.35	0.35	0.36
Waste Disposal	0.07	0.08	0.09	0.09	0.10	0.10	0.11	0.11
Provincial Ministry	0.08	0.17	0.17	0.17	0.17	0.17	0.17	0.10
Total, All Sectors	5.65	6.26	6.79	7.32	7.78	8.28	8.48	8.63

OPERATING EXPENSES AS SHARE OF GDP IN
SENES TARGETED INDUSTRIES
(in per cent)

ONE STUDY, SCEN-E, 09/27	1989	1990	1991	1992	1993	1994	1995	1996	1997
					Levels				
Open Pit Mines	0.22	0.40	0.62	0.79	0.97	1.13	1.29	1.49	1.74
Food, Manufacturing	0.38	0.74	1.04	1.32	1.63	1.94	2.25	2.52	2.81
Food, Hospitality	1.10	2.09	2.85	3.56	4.19	4.83	5.47	5.96	6.47
Pulp & Paper, Manufacturing	0.09	0.17	0.21	0.25	0.31	0.37	0.43	0.48	0.52
Pulp & Paper, Printing	0.08	0.16	0.22	0.28	0.34	0.41	0.47	0.53	0.59
Foundries	0.46	0.90	1.12	1.39	1.74	2.10	2.42	2.71	3.02
Non-ferrous Smelters	0.83	1.62	2.03	2.50	3.10	3.71	4.29	4.78	5.30
Iron & Steel Industry	0.39	0.76	0.94	1.17	1.45	1.75	2.02	2.26	2.51
Automotive Industry	0.11	0.22	0.27	0.33	0.39	0.45	0.51	0.57	0.62
Petroleum Refining	3.20	6.32	8.98	11.62	14.42	17.45	20.55	23.73	27.16
Asphalt	0.42	0.82	1.17	1.51	1.88	2.27	2.66	3.07	3.52
Petrochemicals, Manufaturing	0.82	1.63	2.23	2.82	3.43	3.99	4.49	4.89	5.22
Petrochemicals, Dry Cleaning	0.54	1.03	1.43	1.82	2.19	2.57	2.94	3.24	3.56
Non-Metallic Minerals	0.84	1.66	2.01	2.58	3.29	3.99	4.70	5.44	6.08
Electric Power	0.33	0.64	0.91	1.14	1.38	1.65	1.82	2.11	2.32

ONE STUDY, SCEN-E, 09/27	1998	1999	2000	2001	2002	2003	2004	2005
				Levels				
Open Pit Mines	2.00	2.21	2.43	2.66	2.94	3.28	3.56	3.95
Food, Manufacturing	3.09	3.32	3.57	3.84	4.07	4.34	4.29	4.29
Food, Hospitality	6.98	7.34	7.72	8.17	8.52	8.97	9.18	9.47
Pulp & Paper, Manufacturing	0.57	0.60	0.64	0.69	0.72	0.75	0.71	0.70
Pulp & Paper, Printing	0.64	0.68	0.72	0.78	0.82	0.87	0.88	0.91
Foundries	3.34	3.61	3.90	4.23	4.48	4.77	4.80	4.86
Non-ferrous Smelters	5.84	6.24	6.68	7.22	7.60	8.05	7.92	7.86
Iron & Steel Industry	2.77	2.98	3.21	3.48	3.68	3.91	3.90	3.91
Automotive Industry	0.67	0.70	0.73	0.78	0.81	0.84	0.84	0.85
Petroleum Refining	30.56	33.65	37.42	42.19	46.44	51.52	52.84	54.98
Asphalt	3.95	4.35	4.85	5.47	6.04	6.71	6.85	7.10
Petrochemicals, Manufaturing	5.53	5.79	6.05	6.46	6.61	6.84	6.70	6.78
Petrochemicals, Dry Cleaning	3.86	4.10	4.34	4.61	4.80	5.01	5.12	5.27
Non-Metallic Minerals	6.59	7.01	7.48	8.01	8.47	8.97	8.75	8.75
Electric Power	2.51	2.62	2.75	2.90	3.08	3.16	3.18	3.25

APPENDIX E

DETAILED NATIONAL RESULTS

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
*** Gross National Expenditure ***					
Value	880	653	1564	3217	6396
Price	0.00	0.00	0.01	0.03	0.04
Volume	225	121	-135	-425	-403
*** Volumes ***					
Consumption Expenditure	21	10	-85	-146	-55
Durables	8	1	-28	-33	-4
Other	13	9	-58	-113	-52
Government Expenditure	39	38	66	81	203
Current	16	17	45	79	197
Capital	23	21	21	2	6
Business Investment	230	250	198	-44	15
Residential	2	3	5	-7	-1
Nonresidential	228	247	193	-38	16
Inventory Change	78	-15	-46	10	3
Net Exports	-142	-163	-268	-326	-568
Exports	-14	-24	-80	-144	-190
Merchandise	-14	-23	-71	-130	-178
Services	0	-1	-8	-13	-12
Imports	128	139	189	182	378
Merchandise	104	104	125	91	167
Services	24	35	64	91	211
*** Labour Market ***					
Labour Force	1	0	-2	2	5
Employment	11	11	3	-13	0
Unemployment	-10	-11	-5	16	6
Unemployment Rate (%)	-0.08	-0.08	-0.03	0.10	0.03
*** Wages and Prices ***					
Wage & Salary/Employee ($C)	8	-4	47	169	265
Output per Employee ($71)	5	-2	-11	-11	-16
Priv. Non-Agr Unit Lab. Cost	0.00	0.00	0.01	0.02	0.03
Impl. Deflator of Imports	0.00	0.00	0.00	0.00	0.00
Implicit Output Deflator	0.00	0.00	0.01	0.03	0.04
Consumer Price Index	0.00	0.00	0.01	0.02	0.03
*** Incomes ***					
Disposable Income/Capita	2	1	-4	-5	-1
Corporate Profits	133	29	65	487	869
Government Balances (Mn $C)					
All-Governments	317	125	-122	-891	-2372
Federal	309	141	239	85	630
Non-Federal	16	0	-359	-987	-3006
Current Account Balance	-478	-539	-741	-867	-2606
*** Financial ***					
Exchange Rate (US/CAN)	0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods	0.00	0.03	0.16	0.25	0.24
Prime Comm. Paper Rate	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	0.00	0.00	0.00	0.00	0.00

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario A, Sep 6		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.15	0.10	0.20	0.30	0.37
Price		0.01	0.03	0.28	0.51	0.53
Volume		0.13	0.07	-0.07	-0.20	-0.16
*** Volumes ***						
Consumption Expenditure		0.02	0.01	-0.08	-0.12	-0.04
Durables		0.04	0.01	-0.12	-0.13	-0.01
Other		0.02	0.01	-0.07	-0.12	-0.05
Government Expenditure		0.12	0.12	0.20	0.22	0.50
Current		0.06	0.06	0.16	0.26	0.59
Capital		0.51	0.46	0.41	0.03	0.09
Business Investment		0.69	0.74	0.52	-0.10	0.03
Residential		0.02	0.04	0.06	-0.08	-0.01
Nonresidential		0.91	0.98	0.66	-0.11	0.03
Inventory Change	(a)	78	-15	-46	10	3
Net Exports	(a)	-142	-163	-268	-326	-568
Exports		-0.03	-0.05	-0.14	-0.21	-0.23
Merchandise		-0.03	-0.05	-0.14	-0.23	-0.25
Services		0.00	-0.02	-0.09	-0.12	-0.09
Imports		0.25	0.27	0.33	0.29	0.51
Merchandise		0.27	0.27	0.29	0.19	0.29
Services		0.18	0.26	0.44	0.57	1.25
*** Labour Market ***						
Labour Force		0.01	0.00	-0.01	0.01	0.03
Employment		0.09	0.09	0.02	-0.10	0.00
Unemployment		-0.93	-0.93	-0.41	1.23	0.52
Unemployment Rate (%)	(a)	-0.08	-0.08	-0.03	0.10	0.03
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.03	-0.01	0.14	0.41	0.43
Output per Employee ($71)		0.04	-0.01	-0.09	-0.08	-0.11
Priv. Non-Agr Unit Lab. Cost		-0.02	-0.01	0.22	0.46	0.45
Impl. Deflator of Imports		0.01	0.01	-0.02	-0.02	-0.02
Implicit Output Deflator		0.02	0.04	0.29	0.52	0.55
Consumer Price Index		0.01	0.02	0.20	0.39	0.39
*** Incomes ***						
Disposable Income/Capita		0.03	0.02	-0.09	-0.11	-0.02
Corporate Profits		0.23	0.06	0.09	0.41	0.42
Government Balances (Mn $C)						
All-Governments	(a)	317	125	-122	-891	-2372
Federal	(a)	309	141	239	85	630
Non-Federal	(a)	16	0	-359	-987	-3006
Current Account Balance	(a)	-478	-539	-741	-867	-2606
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.00	0.03	0.16	0.25	0.25
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.00	0.00

(a) Level Impact

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
Real Domestic Product	193.9	108.4	-99.6	-328.8	-233.6
Agriculture	3.8	-1.9	-6.5	-7.4	-5.3
Fisheries	0.0	-0.1	-1.1	-2.0	-2.2
Forestry	1.5	0.9	-1.3	-4.5	-5.2
Mining	-4.5	-8.4	-18.1	-14.2	-16.1
Manufacturing	78.6	10.8	-135.5	-255.2	-296.6
Durables	69.0	27.6	-33.6	-117.1	-149.8
Non-Durables	9.5	-16.8	-102.0	-138.1	-146.9
Utilities	11.6	18.8	41.6	43.9	57.7
Construction	25.7	27.3	20.3	-10.3	2.1
Transport, Storage & Comm.	22.2	17.9	0.6	-29.3	-13.9
Trade	29.4	23.1	-3.9	-35.5	-17.1
Finance, Insur. & Real Est	7.2	3.7	-6.5	-11.5	-9.9
less Royalties	5.7	2.6	-7.8	-12.4	-10.8
Services	12.0	8.4	-10.9	-40.8	-23.5
Housing	0.1	0.2	1.2	0.7	-0.5
Public Administration	6.3	7.7	20.5	37.5	97.0
Special Aggregations					
Goods-Producing	78.5	0.6	-161.7	-281.5	-323.6
Services	115.3	107.7	62.1	-47.3	90.0
Private	105.8	96.9	37.5	-88.8	-22.6
less Housing	105.8	96.7	36.3	-89.5	-22.1
Public	9.5	10.8	24.6	41.5	112.6
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.13	0.07	-0.06	-0.18	-0.11
Agriculture	0.11	-0.05	-0.16	-0.17	-0.11
Fisheries	0.01	-0.06	-0.54	-0.84	-0.77
Forestry	0.17	0.09	-0.12	-0.40	-0.38
Mining	-0.11	-0.20	-0.42	-0.28	-0.28
Manufacturing	0.25	0.03	-0.37	-0.60	-0.57
Durables	0.41	0.16	-0.17	-0.49	-0.50
Non-Durables	0.06	-0.11	-0.63	-0.74	-0.67
Utilities	0.22	0.35	0.72	0.68	0.78
Construction	0.34	0.36	0.25	-0.11	0.02
Transport, Storage & Comm.	0.14	0.11	0.00	-0.14	-0.06
Trade	0.14	0.11	-0.02	-0.15	-0.06
Finance, Insur. & Real Est	0.05	0.03	-0.04	-0.06	-0.05
less Royalties	- 0.04	0.02	-0.05	-0.07	-0.05
Services	0.04	0.03	-0.04	-0.12	-0.06
Housing	0.00	0.00	0.02	0.01	-0.01
Public Administration	0.07	0.08	0.21	0.35	0.82
Special Aggregations					
Goods-Producing	0.19	0.00	-0.36	-0.53	-0.51
Services	0.11	0.10	0.05	-0.04	0.06
Private	0.12	0.11	0.04	-0.08	-0.02
less Housing	0.13	0.12	0.04	-0.09	-0.02
Public	0.04	0.05	0.10	0.16	0.38
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	78.6	10.8	-135.5	-255.2	-296.6
Durables Manufacturing	69.0	27.6	-33.6	-117.1	-149.8
Wood Products	3.3	1.3	-1.4	-8.9	-11.1
Furniture & Fixtures	2.0	1.3	0.3	-1.7	-1.0
Primary Metals	6.6	-2.3	-19.2	-29.5	-38.0
Iron & Steel	7.5	1.1	-9.3	-18.1	-23.0
Primary Non-Ferr. Metals	-0.8	-3.3	-9.9	-11.4	-15.0
Metal Fabrication	15.5	10.6	3.1	-12.1	-13.9
Machinery	16.7	11.0	6.6	-11.7	-20.2
Transportation Equipment	15.9	5.3	-6.0	-17.1	-18.4
Motor Veh. & Trailers	-0.1	-5.2	-14.1	-19.0	-20.9
Motor Veh. Parts & Acc.	10.8	6.5	7.0	3.9	3.1
Aircraft & Parts	1.3	1.0	-1.1	-1.0	-0.4
Railroad Rolling Stock	2.0	1.3	0.7	-1.1	-1.3
Shipbuilding	1.9	1.7	1.7	0.3	1.4
Misc. Trans. Equipment	0.0	0.0	-0.1	-0.2	-0.2
Electrical Products	6.3	1.5	-6.1	-18.4	-23.7
Non-Metal Mineral Products	2.6	-1.1	-11.0	-17.8	-23.5

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.25	0.03	-0.37	-0.60	-0.57
Durables Manufacturing	0.41	0.16	-0.17	-0.49	-0.50
Wood Products	0.22	0.08	-0.08	-0.47	-0.49
Furniture & Fixtures	0.36	0.22	0.04	-0.22	-0.11
Primary Metals	0.27	-0.09	-0.69	-0.91	-0.97
Iron & Steel	0.53	0.08	-0.57	-0.93	-0.97
Primary Non-Ferr. Metals	-0.08	-0.31	-0.85	-0.89	-0.98
Metal Fabrication	0.69	0.47	0.12	-0.38	-0.34
Machinery	0.94	0.63	0.31	-0.40	-0.48
Transportation Equipment	0.34	0.11	-0.10	-0.25	-0.22
Motor Veh. & Trailers	-0.01	-0.25	-0.53	-0.61	-0.55
Motor Veh. Parts & Acc.	0.60	0.37	0.30	0.15	0.09
Aircraft & Parts	0.26	0.20	-0.19	-0.14	-0.04
Railroad Rolling Stock	2.07	1.80	0.56	-0.68	-0.65
Shipbuilding	1.45	1.28	1.23	0.16	0.52
Misc. Trans. Equipment	0.03	-0.04	-0.16	-0.22	-0.15
Electrical Products	0.25	0.06	-0.21	-0.55	-0.58
Non-Metal Mineral Products	0.23	-0.10	-0.84	-1.14	-1.23

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	78.6	10.8	-135.5	-255.2	-296.6
Non-Durables Manufacturing	9.5	-16.8	-102.0	-138.1	-146.9
Food & Beverages	2.7	-1.6	-11.0	-12.5	-11.3
Meat Industry	-0.4	-1.3	-4.4	-5.4	-5.4
Dairy Industry	0.2	0.1	-0.6	-1.0	-0.7
Fish Processing Industry	0.0	-0.1	-0.8	-1.5	-1.7
Grain Mills	0.2	-0.1	-0.7	-0.8	-0.8
Other Food Products	2.1	-0.3	-3.5	-3.5	-2.8
Alcoholic Beverages	0.5	0.1	-1.0	-0.4	0.0
Tobacco Products	0.2	0.0	-0.1	0.1	0.2
Rubber Products	1.9	-0.6	-7.7	-11.4	-12.6
Leather Products	0.1	0.0	-0.6	-1.2	-1.4
Textiles	1.2	0.0	-3.9	-6.5	-6.7
Knitting & Clothing	0.2	0.0	-1.6	-3.0	-3.2
Paper & Allied Products	2.2	0.1	-6.2	-11.3	-11.7
Pulp & Paper	1.2	0.1	-4.1	-7.9	-8.5
Paper Converters	1.0	0.0	-2.2	-3.3	-3.3
Printing & Publishing	1.6	-1.3	-8.2	-12.2	-11.7
Petroleum & Coal Products	0.7	-2.3	-11.2	-13.7	-15.0
Chemicals & Chem. Products	-6.2	-14.4	-50.4	-59.3	-66.4
Industrial Chemicals	-6.0	-11.9	-36.8	-42.0	-47.8
Other Chemicals	-0.2	-2.5	-13.6	-17.4	-18.6
Misc. Manuf. Industries	5.0	3.3	-1.0	-7.1	-6.9

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.25	0.03	-0.37	-0.60	-0.57
Non-Durables Manufacturing	0.06	-0.11	-0.63	-0.74	-0.67
Food & Beverages	0.08	-0.05	-0.30	-0.30	-0.24
Meat Industry	-0.08	-0.22	-0.72	-0.79	-0.68
Dairy Industry	0.05	0.01	-0.16	-0.22	-0.13
Fish Processing Industry	0.01	-0.04	-0.36	-0.62	-0.58
Grain Mills	0.10	-0.03	-0.26	-0.27	-0.22
Other Food Products	0.15	-0.02	-0.22	-0.20	-0.14
Alcoholic Beverages	0.09	0.01	-0.16	-0.05	0.00
Tobacco Products	0.10	-0.01	-0.07	0.11	0.30
Rubber Products	0.16	-0.05	-0.56	-0.70	-0.65
Leather Products	0.03	-0.02	-0.33	-0.61	-0.64
Textiles	0.11	0.00	-0.34	-0.48	-0.41
Knitting & Clothing	0.02	0.00	-0.14	-0.24	-0.23
Paper & Allied Products	0.09	0.01	-0.23	-0.36	-0.32
Pulp & Paper	0.07	0.00	-0.21	-0.36	-0.32
Paper Converters	0.14	0.01	-0.28	-0.38	-0.32
Printing & Publishing	0.08	-0.06	-0.36	-0.47	-0.38
Petroleum & Coal Products	0.29	-1.04	-4.28	-4.81	-4.64
Chemicals & Chem. Products	-0.29	-0.65	-2.13	-2.13	-2.04
Industrial Chemicals	-1.03	-1.96	-5.52	-4.87	-4.51
Other Chemicals	-0.01	-0.16	-0.80	-0.90	-0.85
Misc. Manuf. Industries	0.65	0.42	-0.11	-0.59	-0.44

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
Mining	-4.5	-8.4	-18.1	-14.2	-16.1
Metal Mines	-6.0	-8.1	-11.4	-5.3	-7.8
Coal	1.1	1.2	2.4	2.5	2.9
Petroleum & Gas	-0.1	-0.8	-3.2	-4.4	-4.9
Non-Metal Mines	-0.4	-1.4	-5.2	-5.2	-4.5
Services	0.9	0.6	-0.8	-1.8	-1.9
Utilities	11.6	18.8	41.6	43.9	57.7
Electric Power	10.9	17.8	40.1	41.4	50.5
Gas Distribution	0.5	0.4	-0.1	-0.5	-0.5
Water & Other Utilities	0.2	0.6	1.7	3.0	7.7
Transp., Storage & Comm.	22.2	17.9	0.6	-29.3	-13.9
Transportation	16.5	14.3	4.6	-13.1	0.4
Air Transportation	1.5	0.7	-4.4	-10.1	-9.4
Railway Transportation	4.0	2.7	-1.2	-6.5	-6.1
Pipeline Transportation	1.5	1.2	-0.6	-1.4	-1.9
Urban Transportation	0.2	0.1	-0.5	-1.1	-0.6
Water Transportation	2.8	2.1	-0.5	-4.4	-4.3
Motor Transportation	6.4	7.6	11.7	10.3	22.7
Storage	0.5	0.4	-0.1	-0.8	-0.5
Communications	5.2	3.2	-3.9	-15.4	-13.7
Broadcasting	1.1	0.7	-1.0	-3.3	-2.7
Telephone	3.6	2.1	-2.7	-11.1	-10.3
Post Office	0.5	0.3	-0.3	-1.0	-0.7
Trade	29.4	23.1	-3.9	-35.5	-17.1
Wholesale Trade	22.6	18.9	6.0	-15.9	-9.6
Retail Trade	6.9	4.2	-9.9	-19.7	-7.4
Services	12.0	8.4	-10.9	-40.8	-23.5
Education Services	2.0	1.2	0.1	-1.4	1.5
Health Services	1.2	1.8	4.0	5.4	14.1
Hotels & Restaurants	1.7	1.9	-6.7	-22.8	-19.1
Business Services	6.9	3.4	-4.2	-11.9	-11.1
Other Services	0.1	0.0	-4.1	-10.1	-8.9

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Mining	-0.11	-0.20	-0.42	-0.28	-0.28
Metal Mines	-0.43	-0.55	-0.77	-0.33	-0.37
Coal	0.28	0.33	0.57	0.57	0.58
Petroleum & Gas	-0.01	-0.05	-0.20	-0.22	-0.25
Non-Metal Mines	-0.08	-0.28	-0.96	-0.82	-0.58
Services	0.36	0.25	-0.26	-0.51	-0.45
Utilities	0.22	0.35	0.72	0.68	0.78
Electric Power	0.25	0.40	0.83	0.76	0.82
Gas Distribution	0.10	0.08	-0.02	-0.08	-0.06
Water & Other Utilities	0.07	0.16	0.48	0.77	1.77
Transp., Storage & Comm.	0.14	0.11	0.00	-0.14	-0.06
Transportation	0.18	0.15	0.04	-0.11	0.00
Air Transportation	0.08	0.04	-0.21	-0.43	-0.35
Railway Transportation	0.17	0.12	-0.05	-0.22	-0.17
Pipeline Transportation	0.24	0.19	-0.09	-0.18	-0.20
Urban Transportation	0.07	0.04	-0.15	-0.29	-0.14
Water Transportation	0.36	0.27	-0.05	-0.40	-0.32
Motor Transportation	0.19	0.22	0.32	0.25	0.48
Storage	0.19	0.14	-0.04	-0.22	-0.12
Communications	0.08	0.05	-0.05	-0.18	-0.14
Broadcasting	0.15	0.10	-0.11	-0.33	-0.24
Telephone	0.07	0.04	-0.04	-0.16	-0.13
Post Office	0.09	0.06	-0.04	-0.15	-0.09
Trade	0.14	0.11	-0.02	-0.15	-0.06
Wholesale Trade	0.24	0.20	0.06	-0.14	-0.07
Retail Trade	0.06	0.04	-0.08	-0.15	-0.05
Services	0.04	0.03	-0.04	-0.12	-0.06
Education Services	0.03	0.02	0.00	-0.02	0.02
Health Services	0.02	0.02	0.05	0.06	0.14
Hotels & Restaurants	0.05	0.05	-0.17	-0.48	-0.33
Business Services	0.11	0.05	-0.06	-0.15	-0.13
Other Services	0.00	0.00	-0.08	-0.18	-0.14

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0
Labour Force	0.9	-0.5	-1.9	2.1	5.5
Civilian Source Population	0.0	0.0	0.0	0.0	0.0
Participation Rate (%)	0.00	0.00	-0.01	0.01	0.02
Total Employment	11.1	10.8	3.2	-13.4	-0.1
Agriculture	0.3	0.0	-0.9	-1.3	-1.7
Fisheries	0.0	0.0	-0.2	-0.4	-0.6
Forestry	0.0	0.0	0.0	-0.2	-0.2
Mining	-0.2	-0.2	-0.6	-0.8	-1.3
Manufacturing	4.6	4.2	0.2	-5.9	-5.9
Utilities	0.2	0.4	0.9	0.9	1.0
Construction	2.1	2.4	2.3	-1.0	0.3
Transport, Storage & Comm.	0.3	0.5	0.5	0.2	1.5
Trade	1.2	1.1	-0.1	-3.1	-1.7
Finance, Insur. & Real Est	0.2	0.1	-0.3	-0.6	-0.4
Services	1.6	1.4	-0.7	-4.7	-0.2
Public Administration	0.6	0.8	2.0	3.5	9.1
Unemployment	-10.2	-11.3	-5.0	15.5	5.5
Unemployment Rate (%)	-0.08	-0.08	-0.03	0.10	0.03
Special Aggregations					
Goods-Producing	4.79	4.01	-1.43	-8.55	-9.60
Services	6.31	6.77	4.58	-4.85	9.51
Private	5.13	5.34	1.43	-10.00	-5.07
Public	1.19	1.43	3.16	5.15	14.58

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00
Labour Force	0.01	0.00	-0.01	0.01	0.03
Civilian Source Population	0.00	0.00	0.00	0.00	0.00
Total Employment	0.09	0.09	0.02	-0.10	0.00
Agriculture	0.07	0.00	-0.17	-0.26	-0.28
Fisheries	0.00	-0.05	-0.44	-0.76	-0.93
Forestry	0.04	0.05	-0.01	-0.24	-0.31
Mining	-0.08	-0.11	-0.29	-0.39	-0.62
Manufacturing	0.21	0.20	0.01	-0.28	-0.28
Utilities	0.17	0.31	0.69	0.70	0.78
Construction	0.32	0.35	0.30	-0.11	0.03
Transport, Storage & Comm.	0.04	0.06	0.06	0.02	0.18
Trade	0.06	0.05	-0.01	-0.14	-0.07
Finance, Insur. & Real Est	0.02	0.02	-0.03	-0.08	-0.05
Services	0.04	0.03	-0.01	-0.09	0.00
Public Administration	0.07	0.09	0.24	0.40	0.97
Unemployment	-0.93	-0.93	-0.41	1.23	0.52
Special Aggregations					
Goods-Producing	0.16	0.14	-0.05	-0.29	-0.32
Services	0.07	0.07	0.05	-0.05	0.08
Private	0.08	0.08	0.02	-0.13	-0.06
Public	0.04	0.05	0.11	0.17	0.44

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
Paid Agriculture	0.1	0.0	-0.3	-0.5	-0.9
Other Than Paid Agriculture	0.2	0.0	-0.5	-0.8	-0.8
Forestry	0.0	0.0	0.0	-0.2	-0.2
Fishing & Trapping	0.0	0.0	-0.2	-0.4	-0.6
Mining	-0.2	-0.2	-0.6	-0.8	-1.3
Metal Mining	-0.2	-0.3	-0.4	-0.2	-0.1
Coal Mining	0.0	0.0	0.1	0.1	0.1
Petroleum & Gas Mining	0.0	0.0	-0.1	-0.2	-0.2
Non-metal Mining	0.0	0.0	-0.1	-0.2	-0.1
Mining Services	0.0	0.1	0.0	-0.4	-0.9
Manufacturing	4.6	4.2	0.2	-5.9	-5.9
Food	0.3	0.1	-0.7	-0.8	-0.4
Tobacco	0.0	0.0	0.0	0.0	0.0
Rubber	0.1	0.0	-0.3	-0.6	-0.4
Leather	0.0	0.0	-0.1	-0.1	-0.1
Textiles	0.0	0.0	0.0	-0.1	-0.2
Knitting & Clothing	0.0	0.0	-0.1	-0.2	-0.2
Wood	0.1	0.2	-0.1	-0.6	-0.5
Furniture & Fixtures	0.1	0.0	0.0	-0.1	-0.1
Pulp & Paper	0.0	0.0	0.0	-0.2	-0.4
Paper Converters	0.0	0.0	-0.1	-0.2	-0.2
Printing & Publishing	-0.1	-0.4	-0.8	-0.6	-0.2
Primary Metals	0.6	1.0	1.6	1.2	1.3
Metal Fabricating	0.7	0.7	0.3	-0.6	-0.6
Machinery	0.6	0.6	0.3	-0.4	-0.6
Automobiles & Parts	0.7	0.6	0.5	-0.2	-0.4
Aircraft & Parts	0.0	0.0	-0.1	0.0	0.0
Railroad Equip. & Misc.	0.1	0.1	0.2	-0.3	-2.3
Shipbuilding	0.1	0.1	0.2	0.0	0.2
Electrical Products	0.2	0.1	-0.2	-0.7	-0.7
Non-metallic Minerals	0.3	0.5	0.5	0.8	1.1
Petroleum & Coal	0.1	0.2	0.3	0.3	0.3
Chemicals	0.2	0.1	-1.3	-1.9	-1.3
Miscellaneous	0.2	0.2	0.0	-0.5	-0.4

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Paid Agriculture	0.06	0.00	-0.15	-0.21	-0.29
Other Than Paid Agriculture	0.07	0.01	-0.16	-0.25	-0.23
Forestry	0.04	0.05	-0.01	-0.25	-0.31
Fishing & Trapping	0.00	-0.05	-0.43	-0.74	-0.91
Mining	-0.08	-0.12	-0.31	-0.41	-0.66
Metal Mining	-0.43	-0.57	-1.01	-0.45	-0.42
Coal Mining	0.14	0.24	0.52	0.65	0.68
Petroleum & Gas Mining	0.00	-0.04	-0.19	-0.28	-0.33
Non-metal Mining	-0.02	-0.08	-0.46	-0.67	-0.53
Mining Services	0.09	0.13	-0.03	-0.64	-1.30
Manufacturing	0.22	0.21	0.01	-0.29	-0.29
Food	0.11	0.02	-0.27	-0.29	-0.12
Tobacco	-0.05	-0.09	-0.13	0.09	0.13
Rubber	0.12	0.01	-0.59	-1.15	-1.12
Leather	0.02	0.00	-0.28	-0.79	-0.79
Textiles	-0.02	0.05	-0.06	-0.31	-0.40
Knitting & Clothing	0.01	0.00	-0.09	-0.17	-0.14
Wood	0.11	0.13	-0.10	-0.63	-0.63
Furniture & Fixtures	0.13	0.03	0.03	-0.16	-0.10
Pulp & Paper	0.02	0.03	-0.03	-0.27	-0.41
Paper Converters	0.06	0.04	-0.23	-0.54	-0.50
Printing & Publishing	-0.06	-0.22	-0.53	-0.40	-0.13
Primary Metals	0.66	1.01	1.71	1.26	1.36
Metal Fabricating	0.45	0.46	0.18	-0.32	-0.28
Machinery	0.52	0.52	0.29	-0.31	-0.41
Automobiles & Parts	0.43	0.40	0.28	-0.12	-0.24
Aircraft & Parts	0.08	0.04	-0.14	-0.11	-0.04
Railroad Equip. & Misc.	0.79	0.80	1.44	-1.50	-10.26
Shipbuilding	0.70	1.04	1.32	0.25	0.63
Electrical Products	0.15	0.11	-0.15	-0.58	-0.61
Non-metallic Minerals	0.49	0.74	0.82	1.31	1.85
Petroleum & Coal	0.69	0.92	1.52	1.39	1.76
Chemicals	0.26	0.07	-1.28	-1.82	-1.14
Miscellaneous	0.27	0.30	0.01	-0.50	-0.40

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	2.1	2.4	2.3	-1.0	0.3
Transportation	0.1	0.3	0.6	0.9	1.9
Air	0.0	0.0	0.0	-0.1	0.0
Railway	0.0	0.0	0.0	0.0	0.0
Pipeline	0.0	0.0	0.0	0.0	0.0
Motor	0.1	0.2	0.7	1.1	2.1
Urban	0.0	0.0	-0.1	-0.1	0.0
Water	0.0	0.0	0.0	-0.1	-0.1
Storage	0.0	0.0	0.0	0.0	0.0
Radio & T.V. Comm.	0.1	0.0	-0.1	-0.2	-0.2
Telephone Comm.	0.1	0.1	0.0	-0.2	-0.1
Postal Comm.	0.1	0.1	-0.1	-0.2	-0.2
Electric Utilities	0.2	0.4	0.9	0.9	0.9
Gas Distr. Util.	0.0	0.0	0.0	0.0	0.0
Water & Other Util.	0.0	0.0	0.0	0.1	0.1
Retail Trade	0.7	0.3	-0.7	-2.4	-1.2
Wholesale Trade	0.6	0.8	0.6	-0.8	-0.5
Finance, Ins. & R.E.	0.2	0.1	-0.3	-0.6	-0.4
Services	1.6	1.4	-0.7	-4.7	-0.2
Religion	0.0	0.0	0.0	-0.1	0.0
Recreation	0.0	0.0	-0.3	-1.1	-1.0
Business	0.7	0.3	-0.4	-1.1	-1.0
Personal	0.1	0.1	0.1	0.1	0.0
Accomodation & Food	0.3	0.3	-1.1	-4.0	-3.5
Miscellaneous	0.0	0.0	-0.1	-0.2	-0.2
Education	0.3	0.1	-0.1	-0.3	0.1
Hospital	0.3	0.5	1.3	2.0	5.4
Physicians	0.0	0.0	0.0	0.0	0.0
Federal Admin.	0.0	-0.2	-0.3	0.0	0.0
Provincial Admin.	0.2	0.3	0.2	-0.2	-0.1
Municipal Admin.	0.3	0.7	2.1	3.7	9.3

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario A, Sep 6	1989	1990	1993	1998	2005
			% Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	0.33	0.36	0.31	-0.12	0.03
Transportation	0.02	0.06	0.12	0.18	0.39
Air	0.04	0.03	-0.10	-0.14	-0.08
Railway	0.01	0.08	0.05	-0.05	0.00
Pipeline	0.00	0.00	0.00	-0.01	-0.04
Motor	0.03	0.07	0.21	0.36	0.69
Urban	-0.09	-0.11	-0.25	-0.18	0.08
Water	-0.04	0.11	0.13	-0.18	-0.32
Storage	0.04	0.07	0.05	-0.17	-0.19
Radio & T.V. Comm.	0.15	0.10	-0.11	-0.35	-0.27
Telephone Comm.	0.06	0.08	-0.03	-0.26	-0.13
Postal Comm.	0.12	0.07	-0.05	-0.19	-0.10
Electric Utilities	0.21	0.40	0.95	0.96	1.06
Gas Distr. Util.	0.10	0.08	-0.02	-0.08	-0.06
Water & Other Util.	0.01	0.02	0.10	0.37	0.79
Retail Trade	0.04	0.02	-0.04	-0.14	-0.07
Wholesale Trade	0.10	0.14	0.10	-0.13	-0.09
Finance, Ins. & R.E.	0.02	0.02	-0.04	-0.08	-0.05
Services	0.04	0.03	-0.01	-0.09	0.00
Religion	0.01	0.01	-0.02	-0.07	-0.03
Recreation	0.01	0.02	-0.14	-0.38	-0.30
Business	0.08	0.04	-0.04	-0.11	-0.09
Personal	0.01	0.02	0.02	0.01	0.01
Accomodation & Food	0.04	0.04	-0.12	-0.38	-0.27
Miscellaneous	0.00	0.00	-0.03	-0.06	-0.04
Education	0.03	0.02	-0.01	-0.03	0.01
Hospital	0.04	0.07	0.16	0.22	0.57
Physicians	0.00	0.00	-0.01	-0.01	-0.01
Federal Admin.	0.02	-0.07	-0.12	-0.01	-0.01
Provincial Admin.	0.09	0.10	0.06	-0.08	-0.03
Municipal Admin.	0.14	0.29	0.88	1.47	3.43

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
*** Gross National Expenditure ***					
Value	1387	905	1870	3694	6286
Price	0.00	0.00	0.01	0.03	0.05
Volume	370	208	-166	-650	-721
*** Volumes ***					
Consumption Expenditure	43	39	-96	-224	-186
Durables	17	13	-28	-49	-33
Other	26	26	-68	-176	-153
Government Expenditure	48	39	49	41	107
Current	15	10	22	41	107
Capital	32	29	27	0	0
Business Investment	386	412	346	-43	23
Residential	2	3	8	-10	-3
Nonresidential	384	409	339	-33	26
Inventory Change	132	-15	-62	9	-1
Net Exports	-239	-266	-403	-433	-663
Exports	-43	-74	-188	-288	-334
Merchandise	-43	-72	-177	-270	-318
Services	0	-2	-11	-18	-16
Imports	197	192	215	145	329
Merchandise	157	137	124	39	111
Services	40	55	91	107	218
*** Labour Market ***					
Labour Force	1	-1	-4	1	3
Employment	17	16	4	-25	-18
Unemployment	-16	-17	-7	26	21
Unemployment Rate (%)	-0.12	-0.12	-0.05	0.18	0.13
*** Wages and Prices ***					
Wage & Salary/Employee ($C)	10	-12	46	206	293
Output per Employee ($71)	9	-1	-13	-12	-16
Priv. Non-Agr Unit Lab. Cost	0.00	0.00	0.01	0.03	0.03
Impl. Deflator of Imports	0.00	0.00	0.00	0.00	-0.01
Implicit Output Deflator	0.00	0.00	0.02	0.04	0.05
Consumer Price Index	0.00	0.00	0.01	0.02	0.03
*** Incomes ***					
Disposable Income/Capita	3	2	-5	-9	-6
Corporate Profits	212	7	-37	729	1777
Government Balances (Mn $C)					
All-Governments	529	247	76	-938	-2600
Federal	465	177	307	4	296
Non-Federal	70	85	-231	-955	-2901
Current Account Balance	-760	-804	-980	-851	-2484
*** Financial ***					
Exchange Rate (US/CAN)	0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods	0.04	0.10	0.32	0.44	0.40
Prime Comm. Paper Rate	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	0.00	0.00	0.00	0.01	0.00

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario B, Sep 6		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.23	0.14	0.24	0.35	0.36
Price		0.01	0.02	0.33	0.66	0.65
Volume		0.22	0.12	-0.09	-0.31	-0.29
*** Volumes ***						
Consumption Expenditure		0.04	0.04	-0.09	-0.19	-0.14
Durables		0.08	0.06	-0.12	-0.20	-0.12
Other		0.03	0.03	-0.08	-0.18	-0.14
Government Expenditure		0.15	0.12	0.15	0.11	0.27
Current		0.06	0.04	0.08	0.13	0.32
Capital		0.73	0.64	0.54	0.00	0.00
Business Investment		1.15	1.23	0.91	-0.10	0.04
Residential		0.02	0.04	0.09	-0.11	-0.03
Nonresidential		1.53	1.62	1.16	-0.09	0.05
Inventory Change	(a)	132	-15	-62	9	-1
Net Exports	(a)	-239	-266	-403	-433	-663
Exports		-0.08	-0.14	-0.32	-0.42	-0.40
Merchandise		-0.10	-0.16	-0.35	-0.47	-0.45
Services		0.00	-0.02	-0.13	-0.16	-0.12
Imports	-	0.38	0.37	0.38	0.23	0.45
Merchandise		0.41	0.36	0.29	0.08	0.20
Services		0.30	0.40	0.63	0.67	1.29
*** Labour Market ***						
Labour Force		0.01	-0.01	-0.03	0.01	0.02
Employment		0.14	0.13	0.03	-0.19	-0.12
Unemployment		-1.43	-1.39	-0.61	2.07	1.97
Unemployment Rate (%)	(a)	-0.12	-0.12	-0.05	0.18	0.13
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.04	-0.04	0.14	0.50	0.47
Output per Employee ($71)		0.08	-0.01	-0.10	-0.09	-0.11
Priv. Non-Agr Unit Lab. Cost		-0.05	-0.05	0.24	0.59	0.54
Impl. Deflator of Imports		-0.01	-0.03	-0.08	-0.09	-0.07
Implicit Output Deflator		0.03	0.04	0.35	0.67	0.67
Consumer Price Index		0.00	0.00	0.23	0.50	0.50
*** Incomes ***						
Disposable Income/Capita		0.07	0.06	-0.11	-0.18	-0.12
Corporate Profits		0.37	0.01	-0.05	0.61	0.85
Government Balances (Mn $C)						
All-Governments	(a)	529	247	76	-938	-2600
Federal	(a)	465	177	307	4	296
Non-Federal	(a)	70	85	-231	-955	-2901
Current Account Balance	(a)	-760	-804	-980	-851	-2484
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.04	0.10	0.33	0.46	0.41
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.01	0.00

(a) Level Impact

Informetrica
Limited

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
Real Domestic Product	318.7	185.0	-116.9	-513.2	-501.0
Agriculture	6.8	-2.0	-8.1	-11.1	-10.5
Fisheries	0.1	0.0	-1.2	-2.6	-2.9
Forestry	2.3	1.3	-1.6	-6.4	-7.5
Mining	-6.7	-11.8	-23.9	-17.9	-20.1
Manufacturing	151.4	56.1	-127.7	-318.1	-377.1
Durables	129.5	68.6	-9.8	-142.4	-187.4
Non-Durables	21.9	-12.6	-117.9	-175.7	-189.7
Utilities	13.9	20.3	41.7	40.3	49.8
Construction	36.1	37.9	29.0	-14.9	-3.4
Transport, Storage & Comm.	33.7	25.1	-3.7	-54.7	-50.4
Trade	48.0	39.1	0.6	-34.0	-43.5
Finance, Insur. & Real Est	11.4	5.9	-8.7	-18.7	-18.5
less Royalties	9.3	4.7	-9.8	-19.0	-18.7
Services	15.8	8.5	-23.5	-73.8	-67.0
Housing	0.1	0.2	1.6	1.0	-0.9
Public Administration	5.8	4.4	8.7	18.0	51.1
Special Aggregations					
Goods-Producing	152.9	42.9	-161.3	-353.8	-415.8
Services	165.8	142.1	44.4	-159.4	-85.2
Private	156.2	134.8	34.3	-175.4	-140.7
less Housing	156.1	134.6	32.7	-176.3	-139.8
Public	9.6	7.3	10.1	16.0	55.5
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.21	0.12	-0.07	-0.28	-0.23
Agriculture	0.19	-0.05	-0.21	-0.26	-0.21
Fisheries	0.04	-0.01	-0.62	-1.09	-1.00
Forestry	0.25	0.14	-0.16	-0.57	-0.55
Mining	-0.16	-0.28	-0.55	-0.36	-0.35
Manufacturing	0.48	0.18	-0.35	-0.75	-0.73
Durables	0.76	0.41	-0.05	-0.60	-0.63
Non-Durables	0.15	-0.08	-0.73	-0.94	-0.87
Utilities	0.26	0.38	0.72	0.62	0.67
Construction	0.48	0.50	0.35	-0.16	-0.03
Transport, Storage & Comm.	0.21	0.15	-0.02	-0.27	-0.21
Trade	0.23	0.19	0.00	-0.22	-0.16
Finance, Insur. & Real Est	0.08	0.04	-0.06	-0.10	-0.09
less Royalties	0.07	0.03	-0.06	-0.11	-0.09
Services	0.06	0.03	-0.08	-0.22	-0.17
Housing	0.00	0.00	0.02	0.01	-0.01
Public Administration	0.06	0.05	0.09	0.17	0.43
Special Aggregations					
Goods-Producing	0.38	0.11	-0.36	-0.67	-0.65
Services	0.15	0.13	0.04	-0.12	-0.06
Private	0.18	0.16	0.04	-0.17	-0.12
less Housing	0.20	0.17	0.04	-0.18	-0.12
Public	0.04	0.03	0.04	0.06	0.19
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	151.4	56.1	-127.7	-318.1	-377.1
Durables Manufacturing	129.5	68.6	-9.8	-142.4	-187.4
Wood Products	5.1	1.9	-1.5	-12.4	-15.8
Furniture & Fixtures	3.7	2.5	1.1	-2.4	-1.9
Primary Metals	14.0	2.7	-15.5	-29.0	-38.7
Iron & Steel	14.4	5.9	-5.3	-17.2	-23.4
Primary Non-Ferr. Metals	-0.4	-3.2	-10.2	-11.8	-15.3
Metal Fabrication	22.5	14.9	5.0	-16.2	-20.2
Machinery	25.4	16.3	10.8	-16.2	-29.8
Transportation Equipment	40.4	24.5	6.5	-20.1	-21.6
Motor Veh. & Trailers	-6.2	-20.4	-42.9	-52.2	-48.4
Motor Veh. Parts & Acc.	29.5	29.9	38.9	33.6	27.4
Aircraft & Parts	2.3	2.0	-0.9	-1.4	-0.8
Railroad Rolling Stock	11.5	10.2	8.9	-0.2	-1.0
Shipbuilding	3.2	2.8	2.7	0.3	1.5
Misc. Trans. Equipment	0.0	0.0	-0.2	-0.3	-0.3
Electrical Products	13.7	6.3	-3.6	-24.2	-31.0
Non-Metal Mineral Products	4.8	-0.5	-12.5	-21.9	-28.3

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.48	0.18	-0.35	-0.75	-0.73
Durables Manufacturing	0.76	0.41	-0.05	-0.60	-0.63
Wood Products	0.34	0.12	-0.09	-0.66	-0.70
Furniture & Fixtures	0.65	0.44	0.17	-0.32	-0.20
Primary Metals	0.57	0.11	-0.55	-0.90	-0.99
Iron & Steel	1.02	0.43	-0.32	-0.88	-0.99
Primary Non-Ferr. Metals	-0.04	-0.30	-0.88	-0.92	-1.00
Metal Fabrication	1.00	0.67	0.19	-0.51	-0.50
Machinery	1.42	0.93	0.51	-0.55	-0.71
Transportation Equipment	0.85	0.52	0.11	-0.29	-0.25
Motor Veh. & Trailers	-0.29	-0.96	-1.62	-1.67	-1.27
Motor Veh. Parts & Acc.	1.62	1.70	1.64	1.26	0.84
Aircraft & Parts	0.49	0.40	-0.15	-0.21	-0.09
Railroad Rolling Stock	12.03	13.83	7.44	-0.11	-0.48
Shipbuilding	2.40	2.04	1.94	0.18	0.57
Misc. Trans. Equipment	0.06	-0.05	-0.21	-0.32	-0.23
Electrical Products	0.54	0.25	-0.13	-0.72	-0.75
Non-Metal Mineral Products	0.42	-0.04	-0.96	-1.40	-1.47

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	151.4	56.1	-127.7	-318.1	-377.1
Non-Durables Manufacturing	21.9	-12.6	-117.9	-175.7	-189.7
Food & Beverages	5.0	-0.6	-12.7	-16.5	-16.9
Meat Industry	-0.2	-1.1	-4.6	-6.2	-6.5
Dairy Industry	0.3	0.2	-0.8	-1.4	-1.3
Fish Processing Industry	0.1	0.0	-0.9	-2.0	-2.2
Grain Mills	0.4	0.0	-0.8	-1.1	-1.2
Other Food Products	3.5	0.1	-4.3	-5.0	-5.0
Alcoholic Beverages	0.9	0.3	-1.3	-0.8	-0.7
Tobacco Products	0.3	0.0	-0.2	-0.1	-0.7
Rubber Products	4.0	0.3	-8.8	-14.9	-16.2
Leather Products	0.1	0.0	-0.7	-1.6	-1.8
Textiles	1.8	-0.2	-6.1	-10.6	-10.8
Knitting & Clothing	0.4	0.2	-2.0	-4.3	-4.8
Paper & Allied Products	3.6	0.6	-8.1	-16.1	-17.4
Pulp & Paper	1.9	0.3	-5.3	-11.2	-12.4
Paper Converters	1.7	0.3	-2.8	-4.9	-5.1
Printing & Publishing	3.0	-1.3	-10.3	-16.8	-17.2
Petroleum & Coal Products	0.8	-3.3	-14.9	-17.8	-19.8
Chemicals & Chem. Products	-5.6	-14.1	-54.1	-67.4	-74.8
Industrial Chemicals	-6.2	-12.1	-39.1	-46.3	-52.3
Other Chemicals	0.6	-2.0	-15.0	-21.1	-22.5
Misc. Manuf. Industries	8.4	5.8	0.1	-9.4	-9.3

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.48	0.18	-0.35	-0.75	-0.73
Non-Durables Manufacturing	0.15	-0.08	-0.73	-0.94	-0.87
Food & Beverages	0.15	-0.02	-0.35	-0.40	-0.36
Meat Industry	-0.04	-0.19	-0.75	-0.90	-0.81
Dairy Industry	0.09	0.05	-0.20	-0.32	-0.25
Fish Processing Industry	0.03	0.00	-0.41	-0.81	-0.77
Grain Mills	0.18	-0.01	-0.32	-0.38	-0.35
Other Food Products	0.24	0.00	-0.28	-0.29	-0.25
Alcoholic Beverages	0.15	0.05	-0.21	-0.11	-0.08
Tobacco Products	0.16	-0.02	-0.16	-0.10	-1.43
Rubber Products	0.34	0.03	-0.64	-0.92	-0.83
Leather Products	0.06	0.02	-0.39	-0.82	-0.87
Textiles	0.17	-0.02	-0.53	-0.78	-0.66
Knitting & Clothing	0.03	0.02	-0.17	-0.34	-0.35
Paper & Allied Products	0.15	0.02	-0.30	-0.52	-0.47
Pulp & Paper	0.11	0.02	-0.27	-0.50	-0.47
Paper Converters	0.24	0.04	-0.37	-0.56	-0.49
Printing & Publishing	0.15	-0.06	-0.45	-0.64	-0.56
Petroleum & Coal Products	0.33	-1.50	-5.71	-6.26	-6.13
Chemicals & Chem. Products	-0.26	-0.64	-2.29	-2.42	-2.30
Industrial Chemicals	-1.06	-1.99	-5.85	-5.38	-4.94
Other Chemicals	0.04	-0.13	-0.89	-1.10	-1.02
Misc. Manuf. Industries	1.10	0.74	0.01	-0.78	-0.59

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
Mining	-6.7	-11.8	-23.9	-17.9	-20.1
Metal Mines	-9.2	-12.2	-16.1	-7.1	-9.8
Coal	1.6	1.6	2.7	2.8	3.1
Petroleum & Gas	0.1	-0.7	-3.5	-5.1	-5.6
Non-Metal Mines	-0.1	-1.2	-5.7	-6.2	-5.4
Services	1.0	0.6	-1.2	-2.4	-2.4
Utilities	13.9	20.3	41.7	40.3	49.8
Electric Power	12.9	19.3	41.0	39.8	47.0
Gas Distribution	0.8	0.7	-0.2	-1.0	-1.1
Water & Other Utilities	0.1	0.3	0.9	1.4	3.9
Transp., Storage & Comm.	33.7	25.1	-3.7	-54.7	-50.4
Transportation	24.6	19.3	1.1	-30.2	-23.9
Air Transportation	2.4	1.3	-5.4	-14.0	-13.8
Railway Transportation	6.4	4.1	-1.7	-10.3	-10.7
Pipeline Transportation	2.3	1.6	-0.7	-2.0	-3.1
Urban Transportation	0.3	0.2	-0.7	-1.7	-1.4
Water Transportation	4.5	3.3	-0.5	-6.5	-6.6
Motor Transportation	8.6	8.7	10.1	4.3	11.5
Storage	0.9	0.6	-0.1	-1.2	-1.1
Communications	8.3	5.1	-4.8	-23.3	-25.5
Broadcasting	1.8	1.2	-1.3	-5.0	-4.8
Telephone	5.7	3.4	-3.2	-16.7	-18.9
Post Office	0.8	0.5	-0.3	-1.7	-1.7
Trade	48.0	39.1	0.6	-54.0	-43.5
Wholesale Trade	35.2	29.2	10.6	-24.2	-20.5
Retail Trade	12.8	9.9	-10.0	-29.8	-23.0
Services	15.8	8.5	-23.5	-73.8	-67.0
Education Services	2.6	1.3	-1.1	-4.2	-2.5
Health Services	1.2	1.6	2.5	2.2	6.9
Hotels & Restaurants	3.1	3.8	-7.6	-33.0	-33.7
Business Services	8.6	1.3	-12.5	-24.8	-23.5
Other Services	0.5	0.5	-4.8	-14.1	-14.1

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Mining	-0.16	-0.28	-0.55	-0.36	-0.35
Metal Mines	-0.67	-0.83	-1.09	-0.44	-0.47
Coal	0.42	0.42	0.65	0.62	0.60
Petroleum & Gas	0.00	-0.04	-0.22	-0.26	-0.28
Non-Metal Mines	-0.02	-0.23	-1.06	-0.98	-0.70
Services	0.40	0.24	-0.43	-0.67	-0.56
Utilities	0.26	0.38	0.72	0.62	0.67
Electric Power	0.29	0.43	0.85	0.73	0.76
Gas Distribution	0.15	0.12	-0.03	-0.14	-0.14
Water & Other Utilities	0.04	0.10	0.25	0.37	0.90
Transp., Storage & Comm.	0.21	0.15	-0.02	-0.27	-0.21
Transportation	0.27	0.21	0.01	-0.26	-0.17
Air Transportation	0.13	0.07	-0.26	-0.60	-0.51
Railway Transportation	0.28	0.18	-0.07	-0.35	-0.30
Pipeline Transportation	0.37	0.27	-0.09	-0.25	-0.33
Urban Transportation	0.11	0.08	-0.20	-0.45	-0.31
Water Transportation	0.57	0.42	-0.05	-0.60	-0.48
Motor Transportation	0.25	0.25	0.27	0.11	0.24
Storage	0.31	0.22	-0.03	-0.33	-0.26
Communications	0.12	0.08	-0.06	-0.28	-0.26
Broadcasting	0.24	0.15	-0.15	-0.51	-0.42
Telephone	0.11	0.06	-0.05	-0.24	-0.24
Post Office	0.15	0.10	-0.06	-0.25	-0.22
Trade	0.23	0.19	0.00	-0.22	-0.16
Wholesale Trade	0.37	0.31	0.10	-0.22	-0.16
Retail Trade	0.11	0.09	-0.08	-0.22	-0.15
Services	0.06	0.03	-0.08	-0.22	-0.17
Education Services	0.04	0.02	-0.02	-0.06	-0.03
Health Services	0.02	0.02	0.03	0.03	0.07
Hotels & Restaurants	0.09	0.10	-0.19	-0.69	-0.58
Business Services	0.14	0.02	-0.18	-0.32	-0.27
Other Services	0.01	0.01	-0.10	-0.26	-0.23

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0
Labour Force	1.2	-0.9	-3.8	0.8	2.7
Civilian Source Population	0.0	0.0	0.0	0.0	0.0
Participation Rate (%)	0.01	0.00	-0.02	0.00	0.01
Total Employment	17.0	16.0	3.6	-25.4	-18.2
Agriculture	0.6	0.1	-1.1	-1.9	-2.3
Fisheries	0.0	0.0	-0.2	-0.5	-0.7
Forestry	0.0	0.1	0.0	-0.2	-0.3
Mining	-0.3	-0.4	-0.9	-1.1	-1.7
Manufacturing	7.8	7.3	2.6	-6.8	-5.6
Utilities	0.3	0.4	0.9	0.9	0.9
Construction	3.0	3.3	3.2	-1.5	-0.3
Transport, Storage & Comm.	0.5	0.7	0.4	-0.8	-0.4
Trade	2.1	2.0	0.4	-4.5	-3.7
Finance, Insur. & Real Est	0.3	0.2	-0.3	-0.9	-0.8
Services	2.1	1.5	-2.3	-9.6	-7.9
Public Administration	0.5	0.4	0.8	1.5	4.7
Unemployment	-15.8	-16.9	-7.4	26.2	20.9
Unemployment Rate (%)	-0.12	-0.12	-0.05	0.18	0.13
Special Aggregations					
Goods-Producing	8.17	7.17	0.44	-10.46	-10.63
Services	8.83	8.79	3.14	-14.96	-7.54
Private	7.66	7.80	1.84	-16.78	-14.65
Public	1.17	0.98	1.30	1.82	7.11

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00
Labour Force	0.01	-0.01	-0.03	0.01	0.02
Civilian Source Population	0.00	0.00	0.00	0.00	0.00
Total Employment	0.14	0.13	0.03	-0.19	-0.12
Agriculture	0.12	0.03	-0.21	-0.37	-0.39
Fisheries	0.01	-0.03	-0.48	-0.93	-1.21
Forestry	0.06	0.08	-0.01	-0.34	-0.45
Mining	-0.13	-0.18	-0.44	-0.52	-0.82
Manufacturing	0.36	0.35	0.12	-0.32	-0.27
Utilities	0.21	0.35	0.72	0.67	0.69
Construction	0.44	0.49	0.41	-0.17	-0.03
Transport, Storage & Comm.	0.07	0.09	0.06	-0.10	-0.05
Trade	0.10	0.09	0.02	-0.20	-0.16
Finance, Insur. & Real Est	0.04	0.03	-0.04	-0.11	-0.09
Services	0.05	0.04	-0.05	-0.19	-0.14
Public Administration	0.07	0.05	0.09	0.18	0.50
Unemployment	-1.43	-1.39	-0.61	2.07	1.97
Special Aggregations					
Goods-Producing	0.28	0.24	0.01	-0.36	-0.35
Services	0.09	0.09	0.03	-0.14	-0.06
Private	0.11	0.12	0.03	-0.22	-0.17
Public	0.04	0.04	0.05	0.06	0.21

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
Paid Agriculture	0.2	0.0	-0.4	-0.8	-1.2
Other Than Paid Agriculture	0.4	0.1	-0.6	-1.2	-1.2
Forestry	0.0	0.1	0.0	-0.2	-0.3
Fishing & Trapping	0.0	0.0	-0.2	-0.5	-0.7
Mining	-0.3	-0.4	-0.9	-1.1	-1.7
Metal Mining	-0.3	-0.5	-0.7	-0.3	-0.2
Coal Mining	0.0	0.0	0.1	0.1	0.1
Petroleum & Gas Mining	0.0	0.0	-0.1	-0.2	-0.2
Non-metal Mining	0.0	0.0	-0.1	-0.2	-0.2
Mining Services	0.1	0.1	-0.1	-0.5	-1.2
Manufacturing	7.8	7.3	2.6	-6.8	-5.6
Food	0.5	0.2	-0.9	-1.2	-0.7
Tobacco	0.0	0.0	0.0	0.0	0.0
Rubber	0.1	0.1	-0.3	-0.7	-0.6
Leather	0.0	0.0	-0.1	-0.2	-0.2
Textiles	0.0	0.1	-0.1	-0.2	-0.3
Knitting & Clothing	0.0	0.0	-0.2	-0.3	-0.3
Wood	0.3	0.3	-0.1	-0.8	-0.8
Furniture & Fixtures	0.2	0.1	0.1	-0.2	-0.2
Pulp & Paper	0.0	0.0	0.0	-0.3	-0.5
Paper Converters	0.0	0.0	-0.1	-0.3	-0.3
Printing & Publishing	-0.1	-0.4	-1.0	-0.8	-0.4
Primary Metals	0.8	1.1	1.8	1.2	1.1
Metal Fabricating	1.1	1.1	0.5	-0.8	-0.8
Machinery	0.9	0.8	0.5	-0.5	-0.8
Automobiles & Parts	1.4	1.2	0.5	-0.5	-0.6
Aircraft & Parts	0.0	-0.1	-0.3	-0.1	0.1
Railroad Equip. & Misc.	0.8	1.0	2.6	1.9	1.2
Shipbuilding	0.1	0.2	0.3	0.1	0.2
Electrical Products	0.4	0.4	-0.1	-1.0	-1.0
Non-metallic Minerals	0.4	0.5	0.4	0.7	1.0
Petroleum & Coal	0.2	0.2	0.4	0.3	0.4
Chemicals	0.2	0.1	-1.4	-2.2	-1.6
Miscellaneous	0.4	0.4	0.1	-0.6	-0.5

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Paid Agriculture	0.11	0.02	-0.18	-0.31	-0.39
Other Than Paid Agriculture	0.12	0.03	-0.20	-0.37	-0.34
Forestry	0.06	0.08	-0.01	-0.35	-0.45
Fishing & Trapping	0.01	-0.03	-0.47	-0.90	-1.18
Mining	-0.14	-0.19	-0.47	-0.56	-0.87
Metal Mining	-0.69	-0.89	-1.55	-0.69	-0.61
Coal Mining	0.21	0.33	0.61	0.72	0.73
Petroleum & Gas Mining	0.00	-0.03	-0.21	-0.33	-0.37
Non-metal Mining	0.00	-0.06	-0.49	-0.77	-0.64
Mining Services	0.10	0.14	-0.12	-0.88	-1.71
Manufacturing	0.38	0.36	0.13	-0.34	-0.28
Food	0.18	0.07	-0.33	-0.43	-0.25
Tobacco	-0.08	-0.14	-0.22	-0.05	-0.63
Rubber	0.24	0.11	-0.64	-1.53	-1.52
Leather	0.04	0.03	-0.31	-1.04	-1.07
Textiles	-0.02	0.08	-0.09	-0.50	-0.65
Knitting & Clothing	0.02	0.02	-0.11	-0.24	-0.21
Wood	0.23	0.22	-0.11	-0.88	-0.90
Furniture & Fixtures	0.24	0.09	0.10	-0.22	-0.18
Pulp & Paper	0.03	0.03	-0.05	-0.38	-0.61
Paper Converters	0.11	0.08	-0.27	-0.78	-0.77
Printing & Publishing	-0.04	-0.24	-0.63	-0.55	-0.28
Primary Metals	0.85	1.21	1.90	1.27	1.22
Metal Fabricating	0.65	0.66	0.28	-0.42	-0.41
Machinery	0.80	0.77	0.46	-0.42	-0.61
Automobiles & Parts	0.82	0.76	0.26	-0.35	-0.39
Aircraft & Parts	-0.06	-0.25	-0.74	-0.30	0.18
Railroad Equip. & Misc.	4.82	6.30	14.83	9.89	5.62
Shipbuilding	1.16	1.68	2.12	0.33	0.69
Electrical Products	0.32	0.30	-0.04	-0.76	-0.82
Non-metallic Minerals	0.64	0.84	0.67	1.09	1.58
Petroleum & Coal	0.86	1.11	1.83	1.71	2.15
Chemicals	0.26	0.08	-1.42	-2.16	-1.45
Miscellaneous	0.45	0.52	0.14	-0.67	-0.55

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	3.0	3.3	3.2	-1.5	-0.3
Transportation	0.1	0.4	0.6	0.2	0.5
Air	0.0	0.0	-0.1	-0.1	-0.1
Railway	0.0	0.1	0.0	-0.1	-0.1
Pipeline	0.0	0.0	0.0	0.0	0.0
Motor	0.2	0.3	0.7	0.6	1.0
Urban	0.0	0.0	-0.1	-0.1	-0.1
Water	0.0	0.0	0.1	-0.1	-0.2
Storage	0.0	0.0	0.0	0.0	-0.1
Radio & T.V. Comm.	0.1	0.1	-0.1	-0.3	-0.3
Telephone Comm.	0.1	0.1	0.0	-0.4	-0.2
Postal Comm.	0.2	0.1	-0.1	-0.4	-0.4
Electric Utilities	0.2	0.4	0.9	0.9	0.9
Gas Distr. Util.	0.0	0.0	0.0	0.0	0.0
Water & Other Util.	0.0	0.0	0.0	0.0	0.1
Retail Trade	1.2	0.8	-0.5	-3.4	-2.8
Wholesale Trade	0.9	1.2	0.9	-1.1	-0.9
Finance, Ins. & R.E.	0.3	0.2	-0.3	-0.9	-0.8
Services	2.1	1.5	-2.3	-9.6	-7.9
Religion	0.0	0.0	0.0	-0.1	-0.1
Recreation	0.0	0.1	-0.4	-1.5	-1.5
Business	0.8	0.1	-1.2	-2.3	-2.1
Personal	0.1	0.1	0.2	0.1	0.1
Accomodation & Food	0.5	0.6	-1.2	-5.8	-6.3
Miscellaneous	0.0	0.0	-0.1	-0.3	-0.4
Education	0.3	0.1	-0.2	-0.7	-0.5
Hospital	0.3	0.4	0.8	1.0	2.9
Physicians	0.0	0.0	0.0	0.0	0.0
Federal Admin.	0.1	-0.2	-0.5	0.0	0.1
Provincial Admin.	0.3	0.3	0.1	-0.4	-0.3
Municipal Admin.	0.2	0.4	1.1	1.9	5.0

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario B, Sep 6	1989	1990	1993	1998	2005
			% Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	0.46	0.50	0.43	-0.18	-0.03
Transportation	0.03	0.08	0.12	0.05	0.11
Air	0.06	0.05	-0.13	-0.20	-0.11
Railway	0.02	0.11	0.02	-0.17	-0.12
Pipeline	0.00	0.00	0.00	-0.02	-0.05
Motor	0.05	0.09	0.21	0.21	0.32
Urban	-0.10	-0.08	-0.26	-0.34	-0.24
Water	-0.06	0.17	0.21	-0.24	-0.47
Storage	0.07	0.11	0.10	-0.24	-0.34
Radio & T.V. Comm.	0.24	0.16	-0.15	-0.53	-0.47
Telephone Comm.	0.10	0.12	-0.02	-0.39	-0.25
Postal Comm.	0.19	0.12	-0.07	-0.30	-0.26
Electric Utilities	0.25	0.45	1.00	0.96	1.03
Gas Distr. Util.	0.15	0.12	-0.03	-0.15	-0.14
Water & Other Util.	0.01	0.01	0.06	0.19	0.39
Retail Trade	0.07	0.05	-0.03	-0.20	-0.16
Wholesale Trade	0.15	0.21	0.16	-0.19	-0.16
Finance, Ins. & R.E.	0.04	0.04	-0.04	-0.12	-0.09
Services	0.05	0.03	-0.05	-0.18	-0.13
Religion	0.01	0.02	-0.02	-0.10	-0.08
Recreation	0.02	0.04	-0.16	-0.53	-0.48
Business	0.09	0.01	-0.13	-0.23	-0.20
Personal	0.02	0.03	0.04	0.02	0.01
Accomodation & Food	0.06	0.08	-0.14	-0.55	-0.49
Miscellaneous	0.00	0.00	-0.04	-0.08	-0.07
Education	0.04	0.02	-0.03	-0.07	-0.04
Hospital	0.04	0.05	0.10	0.11	0.31
Physicians	0.00	0.00	-0.01	-0.02	-0.01
Federal Admin.	0.03	-0.09	-0.17	0.00	0.03
Provincial Admin.	0.10	0.12	0.05	-0.14	-0.11
Municipal Admin.	0.08	0.16	0.46	0.76	1.83

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
*** Gross National Expenditure ***					
Value	597	401	889	1886	3163
Price	0.00	0.00	0.01	0.02	0.02
Volume	155	79	-117	-350	-400
*** Volumes ***					
Consumption Expenditure	14	7	-68	-128	-113
Durables	6	2	-21	-30	-23
Other	9	5	-48	-98	-90
Government Expenditure	24	18	17	9	31
Current	9	6	8	11	34
Capital	14	12	10	-2	-3
Business Investment	161	177	143	-31	9
Residential	1	2	3	-5	-2
Nonresidential	159	175	140	-26	11
Inventory Change	56	-10	-33	5	-1
Net Exports	-99	-113	-176	-204	-326
Exports	-11	-18	-58	-107	-140
Merchandise	-11	-17	-53	-99	-132
Services	0	0	-4	-8	-7
Imports	88	95	119	98	186
Merchandise	72	72	79	47	77
Services	17	23	40	50	109
*** Labour Market ***					
Labour Force	1	-1	-2	0	1
Employment	8	8	2	-13	-11
Unemployment	-7	-8	-4	13	12
Unemployment Rate (%)	-0.05	-0.06	-0.03	0.09	0.08
*** Wages and Prices ***					
Wage & Salary/Employee ($C)	4	-6	21	105	149
Output per Employee ($71)	3	-2	-8	-8	-8
Priv. Non-Agr Unit Lab. Cost	0.00	0.00	0.01	0.01	0.02
Impl. Deflator of Imports	0.00	0.00	0.00	0.00	0.00
Implicit Output Deflator	0.00	0.00	0.01	0.02	0.03
Consumer Price Index	0.00	0.00	0.00	0.01	0.02
*** Incomes ***					
Disposable Income/Capita	1	0	-4	-5	-4
Corporate Profits	86	4	18	407	1034
Government Balances (Mn $C)					
All-Governments	239	124	50	-439	-1244
Federal	215	100	154	13	150
Non-Federal	29	40	-103	-463	-1399
Current Account Balance	-331	-368	-455	-448	-1268
*** Financial ***					
Exchange Rate (US/CAN)	0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods	0.00	0.02	0.12	0.19	0.18
Prime Comm. Paper Rate	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	0.00	0.00	0.00	0.00	0.00

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario C, Sep 6		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.10	0.06	0.12	0.18	0.18
Price		0.01	0.02	0.18	0.35	0.34
Volume		0.09	0.05	-0.06	-0.17	-0.16
*** Volumes ***						
Consumption Expenditure		0.01	0.01	-0.06	-0.11	-0.08
Durables		0.03	0.01	-0.09	-0.12	-0.08
Other		0.01	0.01	-0.05	-0.10	-0.08
Government Expenditure		0.08	0.06	0.05	0.02	0.08
Current		0.04	0.02	0.03	0.04	0.10
Capital		0.32	0.27	0.19	-0.03	-0.04
Business Investment		0.48	0.53	0.38	-0.07	0.02
Residential		0.01	0.02	0.04	-0.06	-0.02
Nonresidential		0.64	0.69	0.48	-0.07	0.02
Inventory Change	(a)	56	-10	-33	5	-1
Net Exports	(a)	-99	-113	-176	-204	-326
Exports		-0.02	-0.03	-0.10	-0.15	-0.17
Merchandise		-0.02	-0.04	-0.11	-0.17	-0.19
Services		0.00	0.00	-0.05	-0.07	-0.05
Imports		0.17	0.18	0.21	0.16	0.25
Merchandise		0.19	0.19	0.19	0.10	0.14
Services		0.12	0.17	0.27	0.32	0.65
*** Labour Market ***						
Labour Force		0.00	0.00	-0.02	0.00	0.01
Employment		0.06	0.06	0.01	-0.09	-0.07
Unemployment		-0.66	-0.68	-0.33	1.01	1.13
Unemployment Rate (%)	(a)	-0.05	-0.06	-0.03	0.09	0.08
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.02	-0.02	0.06	0.25	0.24
Output per Employee ($71)		0.03	-0.01	-0.07	-0.06	-0.06
Priv. Non-Agr Unit Lab. Cost		-0.02	-0.01	0.13	0.31	0.29
Impl. Deflator of Imports		0.00	0.00	-0.02	-0.03	-0.02
Implicit Output Deflator		0.01	0.02	0.19	0.35	0.35
Consumer Price Index		0.00	0.01	0.12	0.26	0.26
*** Incomes ***						
Disposable Income/Capita		0.02	0.01	-0.08	-0.11	-0.08
Corporate Profits		0.15	0.01	0.02	0.34	0.50
Government Balances (Mn $C)						
All-Governments	(a)	239	124	50	-439	-1244
Federal	(a)	215	100	154	13	150
Non-Federal	(a)	29	40	-103	-463	-1399
Current Account Balance	(a)	-331	-368	-455	-448	-1268
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.00	0.02	0.13	0.19	0.19
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.00	0.00

(a) Level Impact

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MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
Real Domestic Product	134.7	72.6	-87.8	-279.6	-282.7
Agriculture	2.8	-1.2	-4.8	-6.2	-5.9
Fisheries	0.0	0.0	-0.7	-1.4	-1.5
Forestry	1.1	0.6	-0.9	-3.4	-4.0
Mining	-3.1	-5.8	-12.1	-9.3	-10.6
Manufacturing	55.4	7.8	-96.6	-187.5	-221.1
Durables	45.9	13.9	-38.8	-101.7	-129.5
Non-Durables	9.5	-6.1	-57.8	-85.8	-91.6
Utilities	8.7	14.1	30.9	32.1	40.4
Construction	16.5	17.2	11.6	-9.3	-3.5
Transport, Storage & Comm.	15.7	12.8	-0.3	-25.8	-24.2
Trade	21.0	16.7	-3.6	-29.8	-24.6
Finance, Insur. & Real Est	5.1	2.6	-4.7	-9.2	-9.2
less Royalties	4.0	1.9	-5.5	-9.6	-9.6
Services	8.4	5.6	-9.2	-34.2	-32.9
Housing	0.0	0.1	0.8	0.4	-0.7
Public Administration	3.2	2.0	1.8	3.9	15.1
Special Aggregations					
Goods-Producing	55.6	1.0	-114.5	-206.4	-241.7
Services	79.0	71.6	26.6	-73.3	-41.0
Private	73.8	68.2	25.0	-74.4	-55.6
less Housing	73.7	68.0	24.2	-74.8	-54.9
Public	5.3	3.4	1.6	1.2	14.6
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.09	0.05	-0.05	-0.15	-0.13
Agriculture	0.08	-0.03	-0.12	-0.14	-0.12
Fisheries	0.01	-0.03	-0.35	-0.59	-0.53
Forestry	0.12	0.07	-0.09	-0.30	-0.29
Mining	-0.08	-0.14	-0.28	-0.19	-0.18
Manufacturing	0.17	0.02	-0.27	-0.44	-0.43
Durables	0.27	0.08	-0.19	-0.43	-0.43
Non-Durables	0.06	-0.04	-0.36	-0.46	-0.42
Utilities	0.16	0.26	0.53	0.50	0.55
Construction	0.22	0.23	0.14	-0.10	-0.03
Transport, Storage & Comm.	0.10	0.08	0.00	-0.13	-0.10
Trade	0.10	0.08	-0.02	-0.12	-0.09
Finance, Insur. & Real Est	0.04	0.02	-0.03	-0.05	-0.04
less Royalties	0.03	0.01	-0.04	-0.06	-0.05
Services	0.03	0.02	-0.03	-0.10	-0.09
Housing	0.00	0.00	0.01	0.00	-0.01
Public Administration	0.04	0.02	0.02	0.04	0.13
Special Aggregations					
Goods-Producing	0.14	0.00	-0.25	-0.39	-0.38
Services	0.07	0.07	0.02	-0.06	-0.03
Private	0.09	0.08	0.03	-0.07	-0.05
less Housing	0.09	0.09	0.03	-0.08	-0.05
Public	0.02	0.01	0.01	0.00	0.05
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	55.4	7.8	-96.6	-187.5	-221.1
Durables Manufacturing	45.9	13.9	-38.8	-101.7	-129.5
Wood Products	2.3	0.8	-1.1	-6.5	-8.3
Furniture & Fixtures	1.4	0.9	0.1	-1.4	-1.1
Primary Metals	2.5	-6.1	-24.8	-33.9	-43.6
Iron & Steel	3.2	-3.4	-16.8	-24.7	-31.4
Primary Non-Ferr. Metals	-0.7	-2.7	-8.0	-9.2	-12.2
Metal Fabrication	10.9	7.3	1.7	-9.5	-10.9
Machinery	12.1	8.1	4.5	-9.0	-15.1
Transportation Equipment	11.3	3.8	-4.8	-13.1	-14.3
Motor Veh. & Trailers	-0.3	-4.1	-10.8	-14.2	-15.5
Motor Veh. Parts & Acc.	7.8	4.9	5.2	3.1	2.5
Aircraft & Parts	0.9	0.8	-0.7	-0.8	-0.4
Railroad Rolling Stock	1.5	1.0	0.5	-0.9	-1.1
Shipbuilding	1.4	1.2	1.1	-0.1	0.5
Misc. Trans. Equipment	0.0	0.0	-0.1	-0.2	-0.2
Electrical Products	3.9	0.3	-5.5	-14.0	-17.5
Non-Metal Mineral Products	1.6	-1.3	-8.9	-14.1	-18.8

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.17	0.02	-0.27	-0.44	-0.43
Durables Manufacturing	0.27	0.08	-0.19	-0.43	-0.43
Wood Products	0.15	0.06	-0.06	-0.35	-0.36
Furniture & Fixtures	0.25	0.15	0.01	-0.18	-0.12
Primary Metals	0.10	-0.25	-0.89	-1.05	-1.12
Iron & Steel	0.23	-0.25	-1.03	-1.27	-1.33
Primary Non-Ferr. Metals	-0.07	-0.25	-0.69	-0.72	-0.79
Metal Fabrication	0.48	0.33	0.07	-0.30	-0.27
Machinery	0.68	0.46	0.21	-0.31	-0.36
Transportation Equipment	0.24	0.08	-0.08	-0.19	-0.17
Motor Veh. & Trailers	-0.02	-0.19	-0.41	-0.45	-0.41
Motor Veh. Parts & Acc.	0.43	0.28	0.22	0.12	0.08
Aircraft & Parts	0.19	0.15	-0.11	-0.11	-0.05
Railroad Rolling Stock	1.59	1.43	0.42	-0.58	-0.56
Shipbuilding	1.05	0.90	0.77	-0.04	0.20
Misc. Trans. Equipment	0.02	-0.03	-0.13	-0.18	-0.13
Electrical Products	0.15	0.01	-0.19	-0.42	-0.42
Non-Metal Mineral Products	0.14	-0.12	-0.68	-0.91	-0.98

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	55.4	7.8	-96.6	-187.5	-221.1
Non-Durables Manufacturing	9.5	-6.1	-57.8	-85.8	-91.6
Food & Beverages	2.3	-0.3	-6.2	-7.9	-8.1
Meat Industry	0.0	-0.3	-1.5	-2.3	-2.4
Dairy Industry	0.1	0.0	-0.5	-0.8	-0.7
Fish Processing Industry	0.0	0.0	-0.5	-1.0	-1.1
Grain Mills	0.2	0.0	-0.5	-0.6	-0.6
Other Food Products	1.5	-0.1	-2.4	-2.8	-2.8
Alcoholic Beverages	0.4	0.1	-0.8	-0.5	-0.4
Tobacco Products	0.1	0.0	-0.1	-0.1	-0.4
Rubber Products	1.5	-0.2	-4.8	-7.7	-8.2
Leather Products	0.0	0.0	-0.4	-0.9	-1.0
Textiles	0.9	0.0	-2.8	-4.8	-5.1
Knitting & Clothing	0.2	0.0	-1.1	-2.3	-2.6
Paper & Allied Products	1.5	-0.2	-5.3	-9.3	-10.0
Pulp & Paper	0.7	-0.2	-3.8	-6.9	-7.5
Paper Converters	0.7	0.1	-1.5	-2.5	-2.5
Printing & Publishing	1.3	-0.6	-5.1	-8.3	-8.3
Petroleum & Coal Products	1.0	-0.5	-4.7	-6.4	-6.9
Chemicals & Chem. Products	-2.8	-6.9	-26.6	-32.8	-36.0
Industrial Chemicals	-2.9	-5.6	-18.5	-21.7	-24.3
Other Chemicals	0.1	-1.2	-8.1	-11.1	-11.8
Misc. Manuf. Industries	3.5	2.4	-0.6	-5.2	-4.9

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.17	0.02	-0.27	-0.44	-0.43
Non-Durables Manufacturing	0.06	-0.04	-0.36	-0.46	-0.42
Food & Beverages	0.07	-0.01	-0.17	-0.19	-0.17
Meat Industry	0.00	-0.05	-0.25	-0.33	-0.29
Dairy Industry	0.04	0.01	-0.12	-0.17	-0.14
Fish Processing Industry	0.01	-0.02	-0.24	-0.43	-0.40
Grain Mills	0.08	-0.01	-0.18	-0.21	-0.19
Other Food Products	0.11	-0.01	-0.16	-0.16	-0.14
Alcoholic Beverages	0.06	0.01	-0.12	-0.06	-0.05
Tobacco Products	0.07	-0.01	-0.08	-0.05	-0.71
Rubber Products	0.12	-0.02	-0.35	-0.47	-0.42
Leather Products	0.02	-0.01	-0.24	-0.46	-0.48
Textiles	0.08	0.00	-0.24	-0.36	-0.31
Knitting & Clothing	0.01	0.00	-0.10	-0.19	-0.19
Paper & Allied Products	0.06	-0.01	-0.20	-0.30	-0.27
Pulp & Paper	0.04	-0.01	-0.20	-0.31	-0.28
Paper Converters	0.10	0.01	-0.19	-0.28	-0.25
Printing & Publishing	0.07	-0.03	-0.22	-0.32	-0.27
Petroleum & Coal Products	0.42	-0.21	-1.81	-2.23	-2.15
Chemicals & Chem. Products	-0.13	-0.31	-1.12	-1.18	-1.11
Industrial Chemicals	-0.49	-0.93	-2.76	-2.52	-2.29
Other Chemicals	0.01	-0.08	-0.48	-0.58	-0.53
Misc. Manuf. Industries	0.46	0.31	-0.07	-0.43	-0.31

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
Mining	-3.1	-5.8	-12.1	-9.3	-10.6
Metal Mines	-4.3	-5.9	-8.3	-4.0	-5.8
Coal	0.7	0.9	1.6	1.7	2.1
Petroleum & Gas	0.0	-0.4	-2.0	-2.8	-3.1
Non-Metal Mines	-0.1	-0.7	-2.9	-2.9	-2.5
Services	0.6	0.4	-0.6	-1.3	-1.4
Utilities	8.7	14.1	30.9	32.1	40.4
Electric Power	8.3	13.8	30.9	32.3	39.9
Gas Distribution	0.4	0.3	-0.2	-0.5	-0.5
Water & Other Utilities	0.0	0.1	0.2	0.3	1.1
Transp., Storage & Comm.	15.7	12.8	-0.3	-25.8	-24.2
Transportation	11.7	10.3	2.9	-12.7	-9.7
Air Transportation	1.1	0.7	-2.5	-6.7	-6.8
Railway Transportation	2.8	1.9	-0.8	-4.9	-5.2
Pipeline Transportation	1.1	0.8	-0.4	-1.5	-1.6
Urban Transportation	0.1	0.1	-0.3	-0.8	-0.7
Water Transportation	2.0	1.6	-0.3	-3.3	-3.4
Motor Transportation	4.5	5.2	7.2	4.5	8.0
Storage	0.4	0.3	-0.1	-0.6	-0.5
Communications	3.6	2.2	-3.1	-12.5	-14.0
Broadcasting	0.8	0.6	-0.6	-2.5	-2.5
Telephone	2.5	1.4	-2.2	-9.1	-10.6
Post Office	0.3	0.2	-0.2	-0.9	-1.0
Trade	21.0	16.7	-3.6	-29.8	-24.6
Wholesale Trade	16.2	13.8	4.5	-12.6	-10.4
Retail Trade	4.8	2.9	-8.2	-17.2	-14.2
Services	8.4	5.6	-9.2	-34.2	-32.9
Education Services	1.4	0.6	-1.3	-3.2	-2.5
Health Services	0.7	0.8	1.1	0.5	2.0
Hotels & Restaurants	1.3	1.5	-4.2	-16.4	-17.3
Business Services	4.7	2.2	-3.4	-9.2	-9.1
Other Services	0.3	0.6	-1.4	-5.9	-6.0

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Mining	-0.08	-0.14	-0.28	-0.19	-0.18
Metal Mines	-0.31	-0.40	-0.56	-0.24	-0.28
Coal	0.20	0.23	0.39	0.39	0.40
Petroleum & Gas	0.00	-0.03	-0.12	-0.14	-0.16
Non-Metal Mines	-0.02	-0.14	-0.54	-0.47	-0.32
Services	0.23	0.15	-0.21	-0.38	-0.32
Utilities	0.16	0.26	0.53	0.50	0.55
Electric Power	0.19	0.31	0.64	0.60	0.65
Gas Distribution	0.07	0.05	-0.03	-0.07	-0.07
Water & Other Utilities	0.00	0.02	0.05	0.08	0.24
Transp., Storage & Comm.	0.10	0.08	0.00	-0.13	-0.10
Transportation	0.13	0.11	0.03	-0.11	-0.07
Air Transportation	0.06	0.04	-0.12	-0.29	-0.25
Railway Transportation	0.12	0.08	-0.03	-0.17	-0.15
Pipeline Transportation	0.17	0.13	-0.05	-0.18	-0.17
Urban Transportation	0.05	0.03	-0.10	-0.22	-0.16
Water Transportation	0.25	0.20	-0.03	-0.30	-0.25
Motor Transportation	0.13	0.15	0.20	0.11	0.17
Storage	0.14	0.10	-0.03	-0.17	-0.13
Communications	0.05	0.03	-0.04	-0.15	-0.14
Broadcasting	0.11	0.07	-0.08	-0.25	-0.21
Telephone	0.05	0.03	-0.04	-0.13	-0.13
Post Office	0.07	0.04	-0.04	-0.14	-0.12
Trade	0.10	0.08	-0.02	-0.12	-0.09
Wholesale Trade	0.17	0.15	0.04	-0.11	-0.08
Retail Trade	0.04	0.03	-0.07	-0.13	-0.09
Services	0.03	0.02	-0.03	-0.10	-0.09
Education Services	0.02	0.01	-0.02	-0.05	-0.03
Health Services	0.01	0.01	0.01	0.01	0.02
Hotels & Restaurants	0.04	0.04	-0.11	-0.35	-0.30
Business Services	0.07	0.03	-0.05	-0.12	-0.10
Other Services	0.01	0.01	-0.03	-0.11	-0.10

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0
Labour Force	0.5	-0.6	-2.4	0.0	0.9
Civilian Source Population	0.0	0.0	0.0	0.0	0.0
Participation Rate (%)	0.00	0.00	-0.01	0.00	0.00
Total Employment	7.8	7.7	1.6	-12.9	-11.1
Agriculture	0.2	0.0	-0.6	-1.0	-1.4
Fisheries	0.0	0.0	-0.1	-0.2	-0.4
Forestry	0.0	0.0	0.0	-0.1	-0.1
Mining	-0.1	-0.2	-0.5	-0.6	-1.0
Manufacturing	3.6	3.7	1.8	-3.1	-3.5
Utilities	0.2	0.3	0.6	0.6	0.7
Construction	1.4	1.5	1.4	-0.9	-0.2
Transport, Storage & Comm.	0.2	0.4	0.3	-0.1	0.4
Trade	0.9	0.8	-0.2	-2.6	-2.2
Finance, Insur. & Real Est	0.1	0.1	-0.2	-0.5	-0.4
Services	1.1	0.9	-1.1	-4.8	-4.4
Public Administration	0.3	0.2	0.2	0.3	1.4
Unemployment	-7.3	-8.3	-4.0	12.8	12.0
Unemployment Rate (%)	-0.05	-0.06	-0.03	0.09	0.08
Special Aggregations					
Goods-Producing	3.71	3.58	0.54	-5.09	-6.40
Services	4.14	4.13	1.08	-7.77	-4.69
Private	3.47	3.62	0.74	-7.97	-6.71
Public	0.67	0.50	0.34	0.20	2.02

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00
Labour Force	0.00	0.00	-0.02	0.00	0.01
Civilian Source Population	0.00	0.00	0.00	0.00	0.00
Total Employment	0.06	0.06	0.01	-0.09	-0.07
Agriculture	0.05	0.01	-0.12	-0.20	-0.22
Fisheries	0.00	-0.03	-0.28	-0.51	-0.65
Forestry	0.03	0.04	-0.01	-0.18	-0.23
Mining	-0.06	-0.09	-0.24	-0.31	-0.48
Manufacturing	0.17	0.18	0.08	-0.15	-0.17
Utilities	0.12	0.23	0.50	0.49	0.52
Construction	0.20	0.22	0.18	-0.10	-0.01
Transport, Storage & Comm.	0.03	0.05	0.04	-0.01	0.05
Trade	0.04	0.04	-0.01	-0.12	-0.10
Finance, Insur. & Real Est	0.02	0.01	-0.02	-0.06	-0.05
Services	0.03	0.02	-0.02	-0.10	-0.08
Public Administration	0.04	0.02	0.02	0.04	0.15
Unemployment	-0.66	-0.68	-0.33	1.01	1.13
Special Aggregations					
Goods-Producing	0.13	0.12	0.02	-0.17	-0.21
Services	0.04	0.04	0.01	-0.07	-0.04
Private	0.05	0.05	0.01	-0.11	-0.08
Public	0.02	0.02	0.01	0.01	0.06

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
Paid Agriculture	0.1	0.0	-0.3	-0.4	-0.7
Other Than Paid Agriculture	0.2	0.0	-0.4	-0.6	-0.7
Forestry	0.0	0.0	0.0	-0.1	-0.1
Fishing & Trapping	0.0	0.0	-0.1	-0.2	-0.4
Mining	-0.1	-0.2	-0.5	-0.6	-1.0
Metal Mining	-0.2	-0.2	-0.4	-0.2	-0.2
Coal Mining	0.0	0.0	0.1	0.1	0.1
Petroleum & Gas Mining	0.0	0.0	-0.1	-0.1	-0.1
Non-metal Mining	0.0	0.0	-0.1	-0.1	-0.1
Mining Services	0.0	0.0	0.0	-0.3	-0.7
Manufacturing	3.6	3.7	1.8	-3.1	-3.5
Food	0.3	0.2	-0.3	-0.4	-0.2
Tobacco	0.0	0.0	0.0	0.0	0.0
Rubber	0.1	0.0	-0.2	-0.4	-0.3
Leather	0.0	0.0	0.0	-0.1	-0.1
Textiles	0.0	0.0	0.0	-0.1	-0.1
Knitting & Clothing	0.0	0.0	-0.1	-0.2	-0.1
Wood	0.1	0.1	-0.1	-0.4	-0.4
Furniture & Fixtures	0.1	0.0	0.0	-0.1	-0.1
Pulp & Paper	0.1	0.1	0.1	0.0	-0.1
Paper Converters	0.0	0.0	-0.1	-0.2	-0.2
Printing & Publishing	0.0	-0.1	-0.4	-0.4	-0.2
Primary Metals	0.6	1.0	1.8	1.4	1.5
Metal Fabricating	0.5	0.5	0.2	-0.5	-0.5
Machinery	0.4	0.4	0.2	-0.3	-0.4
Automobiles & Parts	0.5	0.4	0.3	-0.2	-0.3
Aircraft & Parts	0.0	0.0	0.0	0.0	0.0
Railroad Equip. & Misc.	0.1	0.1	0.2	-0.3	-1.9
Shipbuilding	0.1	0.1	0.1	0.0	0.1
Electrical Products	0.1	0.1	-0.2	-0.6	-0.5
Non-metallic Minerals	0.3	0.5	0.7	0.9	1.2
Petroleum & Coal	0.1	0.1	0.2	0.2	0.2
Chemicals	0.1	0.0	-0.8	-1.1	-0.7
Miscellaneous	0.2	0.2	0.0	-0.3	-0.3

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			% Impact		
Paid Agriculture	0.05	0.00	-0.11	-0.17	-0.23
Other Than Paid Agriculture	0.05	0.01	-0.12	-0.20	-0.19
Forestry	0.03	0.04	-0.01	-0.18	-0.24
Fishing & Trapping	0.00	-0.03	-0.27	-0.49	-0.63
Mining	-0.07	-0.10	-0.26	-0.33	-0.51
Metal Mining	-0.34	-0.47	-0.90	-0.54	-0.56
Coal Mining	0.10	0.17	0.36	0.45	0.48
Petroleum & Gas Mining	0.00	-0.02	-0.12	-0.18	-0.21
Non-metal Mining	-0.01	-0.04	-0.25	-0.38	-0.30
Mining Services	0.06	0.08	-0.04	-0.48	-0.96
Manufacturing	0.17	0.18	0.09	-0.15	-0.17
Food	0.10	0.06	-0.09	-0.14	-0.05
Tobacco	-0.04	-0.06	-0.10	-0.03	-0.32
Rubber	0.09	0.02	-0.37	-0.79	-0.77
Leather	0.01	0.00	-0.20	-0.59	-0.60
Textiles	-0.01	0.03	-0.04	-0.23	-0.30
Knitting & Clothing	0.01	0.00	-0.06	-0.13	-0.11
Wood	0.07	0.09	-0.08	-0.46	-0.47
Furniture & Fixtures	0.09	0.02	0.01	-0.13	-0.10
Pulp & Paper	0.06	0.11	0.17	-0.03	-0.16
Paper Converters	0.04	0.03	-0.16	-0.41	-0.39
Printing & Publishing	0.01	-0.06	-0.23	-0.26	-0.19
Primary Metals	0.66	1.09	1.93	1.48	1.61
Metal Fabricating	0.31	0.32	0.11	-0.25	-0.22
Machinery	0.38	0.38	0.20	-0.24	-0.31
Automobiles & Parts	0.30	0.28	0.18	-0.10	-0.18
Aircraft & Parts	0.05	0.03	-0.10	-0.08	-0.04
Railroad Equip. & Misc.	0.60	0.63	1.12	-1.32	-8.71
Shipbuilding	0.51	0.74	0.86	-0.01	0.20
Electrical Products	0.09	0.05	-0.15	-0.44	-0.46
Non-metallic Minerals	0.44	0.73	1.02	1.44	1.93
Petroleum & Coal	0.45	0.58	0.93	0.82	1.01
Chemicals	0.10	0.00	-0.80	-1.09	-0.60
Miscellaneous	0.19	0.22	0.01	-0.37	-0.29

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	1.4	1.5	1.4	-0.9	-0.2
Transportation	0.1	0.2	0.4	0.5	0.9
Air	0.0	0.0	0.0	0.0	0.0
Railway	0.0	0.0	0.0	0.0	0.0
Pipeline	0.0	0.0	0.0	0.0	0.0
Motor	0.1	0.2	0.5	0.6	1.0
Urban	0.0	0.0	-0.1	0.0	0.0
Water	0.0	0.0	0.0	0.0	-0.1
Storage	0.0	0.0	0.0	0.0	0.0
Radio & T.V. Comm.	0.0	0.0	0.0	-0.1	-0.1
Telephone Comm.	0.1	0.1	0.0	-0.2	-0.1
Postal Comm.	0.1	0.0	0.0	-0.2	-0.2
Electric Utilities	0.1	0.3	0.6	0.6	0.7
Gas Distr. Util.	0.0	0.0	0.0	0.0	0.0
Water & Other Util.	0.0	0.0	0.0	0.0	0.0
Retail Trade	0.5	0.2	-0.6	-2.0	-1.7
Wholesale Trade	0.4	0.6	0.4	-0.6	-0.5
Finance, Ins. & R.E.	0.1	0.1	-0.2	-0.5	-0.4
Services	1.1	0.9	-1.1	-4.8	-4.4
Religion	0.0	0.0	0.0	0.0	0.0
Recreation	0.0	0.1	-0.1	-0.7	-0.7
Business	0.5	0.2	-0.3	-0.8	-0.8
Personal	0.0	0.0	0.0	0.0	-0.1
Accomodation & Food	0.2	0.2	-0.7	-2.9	-3.3
Miscellaneous	0.0	0.0	-0.1	-0.1	-0.2
Education	0.2	0.1	-0.2	-0.5	-0.4
Hospital	0.2	0.2	0.4	0.4	1.0
Physicians	0.0	0.0	0.0	0.0	0.0
Federal Admin.	0.0	-0.1	-0.3	0.0	0.1
Provincial Admin.	0.2	0.2	0.1	-0.2	-0.1
Municipal Admin.	0.1	0.1	0.3	0.5	1.5

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario C, Sep 6	1989	1990	1993	1998	2005
			% Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	0.21	0.23	0.18	-0.10	-0.01
Transportation	0.01	0.04	0.09	0.10	0.19
Air	0.03	0.02	-0.06	-0.09	-0.05
Railway	0.01	0.05	0.05	0.00	0.04
Pipeline	0.00	0.00	0.00	-0.01	-0.04
Motor	0.02	0.05	0.14	0.21	0.34
Urban	-0.06	-0.07	-0.16	-0.12	0.00
Water	-0.03	0.08	0.10	-0.12	-0.24
Storage	0.03	0.05	0.04	-0.13	-0.17
Radio & T.V. Comm.	0.11	0.07	-0.07	-0.26	-0.24
Telephone Comm.	0.04	0.05	-0.03	-0.20	-0.13
Postal Comm.	0.08	0.05	-0.05	-0.16	-0.15
Electric Utilities	0.16	0.30	0.70	0.72	0.80
Gas Distr. Util.	0.07	0.05	-0.03	-0.07	-0.07
Water & Other Util.	0.00	0.00	0.01	0.04	0.09
Retail Trade	0.03	0.01	-0.03	-0.12	-0.10
Wholesale Trade	0.07	0.10	0.07	-0.10	-0.08
Finance, Ins. & R.E.	0.02	0.01	-0.03	-0.06	-0.05
Services	0.02	0.02	-0.02	-0.09	-0.07
Religion	0.00	0.00	-0.02	-0.06	-0.05
Recreation	0.01	0.03	-0.05	-0.23	-0.21
Business	0.05	0.02	-0.04	-0.09	-0.08
Personal	0.00	0.00	0.00	-0.01	-0.01
Accomodation & Food	0.03	0.03	-0.08	-0.28	-0.26
Miscellaneous	0.00	0.00	-0.01	-0.03	-0.03
Education	0.02	0.01	-0.02	-0.05	-0.04
Hospital	0.03	0.03	0.05	0.04	0.11
Physicians	0.00	0.00	-0.01	-0.01	-0.01
Federal Admin.	0.01	-0.05	-0.10	-0.01	0.02
Provincial Admin.	0.08	0.09	0.06	-0.07	-0.05
Municipal Admin.	0.02	0.04	0.12	0.21	0.55

MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
*** Gross National Expenditure ***					
Value	335	244	581	1866	5989
Price	0.00	0.00	0.00	0.01	0.04
Volume	86	49	-43	-190	-371
*** Volumes ***					
Consumption Expenditure	8	5	-30	-78	-70
Durables	3	1	-10	-20	-12
Other	5	4	-21	-58	-59
Government Expenditure	14	14	25	61	194
Current	6	6	17	52	185
Capital	9	8	8	9	10
Business Investment	86	94	78	48	4
Residential	1	1	2	-1	-1
Nonresidential	86	93	76	49	6
Inventory Change	30	-4	-16	-11	-6
Net Exports	-52	-60	-99	-211	-493
Exports	-6	-10	-31	-83	-175
Merchandise	-6	-9	-28	-76	-163
Services	0	0	-3	-7	-12
Imports	46	50	68	127	319
Merchandise	37	37	45	72	161
Services	9	13	24	55	158
*** Labour Market ***					
Labour Force	0	0	-1	0	4
Employment	4	4	2	-2	2
Unemployment	-4	-4	-2	2	2
Unemployment Rate (%)	-0.03	-0.03	-0.02	0.01	0.01
*** Wages and Prices ***					
Wage & Salary/Employee ($C)	3	-2	16	76	238
Output per Employee ($71)	2	0	-4	-9	-18
Priv. Non-Agr Unit Lab. Cost	0.00	0.00	0.00	0.01	0.03
Impl. Deflator of Imports	0.00	0.00	0.00	0.00	0.00
Implicit Output Deflator	0.00	0.00	0.00	0.01	0.04
Consumer Price Index	0.00	0.00	0.00	0.01	0.02
*** Incomes ***					
Disposable Income/Capita	1	0	-1	-3	-2
Corporate Profits	53	6	27	186	464
Government Balances (Mn $C)					
All-Governments	121	50	-34	-354	-1744
Federal	121	72	98	168	655
Non-Federal	6	-1	-131	-533	-2403
Current Account Balance	-176	-200	-274	-613	-2157
*** Financial ***					
Exchange Rate (US/CAN)	0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods	0.00	0.01	0.06	0.14	0.23
Prime Comm. Paper Rate	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	0.00	0.00	0.00	0.00	0.00

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MAJOR ECONOMIC INDICATORS
SUMMARY TABLE

Scenario E, Sep 27		1989	1990	1993	1998	2005
				% Impact		
*** Gross National Expenditure ***						
Value		0.06	0.04	0.08	0.18	0.34
Price		0.00	0.01	0.10	0.27	0.49
Volume		0.05	0.03	-0.02	-0.09	-0.15
*** Volumes ***						
Consumption Expenditure		0.01	0.00	-0.03	-0.06	-0.05
Durables		0.01	0.00	-0.04	-0.08	-0.04
Other		0.01	0.00	-0.02	-0.06	-0.05
Government Expenditure		0.05	0.05	0.08	0.17	0.48
Current		0.02	0.02	0.06	0.17	0.55
Capital		0.19	0.18	0.16	0.15	0.14
Business Investment		0.26	0.28	0.21	0.11	0.01
Residential		0.01	0.01	0.02	-0.01	-0.01
Nonresidential		0.34	0.37	0.26	0.14	0.01
Inventory Change	(a)	30	-4	-16	-11	-6
Net Exports	(a)	-52	-60	-99	-211	-493
Exports		-0.01	-0.02	-0.05	-0.12	-0.21
Merchandise		-0.01	-0.02	-0.06	-0.13	-0.23
Services		0.00	-0.01	-0.03	-0.06	-0.08
Imports		0.09	0.10	0.12	0.20	0.43
Merchandise		0.10	0.10	0.11	0.15	0.28
Services		0.07	0.09	0.16	0.35	0.93
*** Labour Market ***						
Labour Force		0.00	0.00	-0.01	0.00	0.02
Employment		0.03	0.03	0.01	-0.01	0.01
Unemployment		-0.35	-0.36	-0.19	0.16	0.19
Unemployment Rate (%)	(a)	-0.03	-0.03	-0.02	0.01	0.01
*** Wages and Prices ***						
Wage & Salary/Employee ($C)		0.01	-0.01	0.05	0.18	0.38
Output per Employee ($71)		0.02	0.00	-0.03	-0.06	-0.13
Priv. Non-Agr Unit Lab. Cost		-0.01	-0.01	0.07	0.23	0.44
Impl. Deflator of Imports		0.00	0.00	-0.01	-0.02	-0.03
Implicit Output Deflator		0.01	0.01	0.10	0.27	0.51
Consumer Price Index		0.00	0.01	0.07	0.20	0.35
*** Incomes ***						
Disposable Income/Capita		0.01	0.01	-0.03	-0.06	-0.04
Corporate Profits		0.09	0.01	0.04	0.16	0.22
Government Balances (Mn $C)						
All-Governments	(a)	121	50	-34	-354	-1744
Federal	(a)	121	72	98	168	655
Non-Federal	(a)	6	-1	-131	-533	-2403
Current Account Balance	(a)	-176	-200	-274	-613	-2157
*** Financial ***						
Exchange Rate (US/CAN)		0.00	0.00	0.00	0.00	0.00
Terms of Trade, Goods		0.00	0.01	0.06	0.15	0.24
Prime Comm. Paper Rate	(a)	0.00	0.00	0.00	0.00	0.00
Industrial Bond Rate	(a)	0.00	0.00	0.00	0.00	0.00

(a) Level Impact

Informetrica
Limited

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
Real Domestic Product	74.9	45.9	-29.9	-142.8	-244.7
Agriculture	1.5	-0.4	-2.5	-4.8	-6.1
Fisheries	0.0	0.0	-0.4	-1.1	-2.3
Forestry	0.6	0.4	-0.4	-2.1	-4.9
Mining	-0.6	-1.9	-5.6	-9.8	-16.8
Manufacturing	30.2	6.1	-47.6	-140.2	-295.8
Durables	26.2	11.2	-11.4	-58.2	-147.7
Non-Durables	4.0	-5.1	-36.2	-82.0	-148.0
Utilities	4.6	7.4	16.1	31.7	55.9
Construction	9.6	10.2	7.8	3.6	1.0
Transport, Storage & Comm.	8.3	7.1	0.9	-9.0	-13.6
Trade	11.2	9.1	-0.6	-13.5	-22.0
Finance, Insur. & Real Est	2.8	1.6	-2.2	-6.5	-11.6
less Royalties	2.2	1.2	-2.7	-7.2	-12.4
Services	4.5	3.4	-3.5	-16.5	-20.5
Housing	0.0	0.1	0.5	0.6	0.4
Public Administration	2.3	2.9	7.7	24.9	91.4
Special Aggregations					
Goods-Producing	31.2	3.8	-56.3	-157.1	-323.8
Services	43.7	42.1	26.5	14.3	79.1
Private	40.2	38.0	17.2	-14.1	-26.7
less Housing	40.2	38.0	16.8	-14.7	-27.1
Public	3.5	4.1	9.2	28.4	105.8
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0

MAJOR ECONOMIC INDICATORS
OUTPUT BY KEY SECTORS
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			% Impact		
Real Domestic Product	0.05	0.03	-0.02	-0.08	-0.11
Agriculture	0.04	-0.01	-0.06	-0.11	-0.12
Fisheries	0.00	-0.01	-0.20	-0.48	-0.79
Forestry	0.06	0.04	-0.04	-0.18	-0.36
Mining	-0.02	-0.05	-0.13	-0.19	-0.29
Manufacturing	0.10	0.02	-0.13	-0.33	-0.57
Durables	0.15	0.07	-0.06	-0.24	-0.49
Non-Durables	0.03	-0.03	-0.22	-0.44	-0.68
Utilities	0.09	0.14	0.28	0.49	0.76
Construction	0.13	0.14	0.09	0.04	0.01
Transport, Storage & Comm.	0.05	0.04	0.01	-0.04	-0.06
Trade	0.05	0.04	0.00	-0.06	-0.08
Finance, Insur. & Real Est	0.02	0.01	-0.01	-0.04	-0.06
less Royalties	0.02	0.01	-0.02	-0.04	-0.06
Services	0.02	0.01	-0.01	-0.05	-0.05
Housing	0.00	0.00	0.01	0.01	0.00
Public Administration	0.03	0.03	0.08	0.23	0.77
Special Aggregations					
Goods-Producing	0.08	0.01	-0.12	-0.30	-0.51
Services	0.04	0.04	0.02	0.01	0.05
Private	0.05	0.04	0.02	-0.01	-0.02
less Housing	0.05	0.05	0.02	-0.02	-0.02
Public	0.02	0.02	0.04	0.11	0.36
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	30.2	6.1	-47.6	-140.2	-295.8
Durables Manufacturing	26.2	11.2	-11.4	-58.2	-147.7
Wood Products	1.2	0.5	-0.4	-3.7	-9.9
Furniture & Fixtures	0.8	0.5	0.1	-0.5	-1.1
Primary Metals	2.5	-0.8	-7.4	-18.6	-38.8
Iron & Steel	2.8	0.4	-3.6	-11.0	-23.7
Primary Non-Ferr. Metals	-0.3	-1.2	-3.7	-7.6	-15.0
Metal Fabrication	5.9	4.2	1.5	-3.7	-14.6
Machinery	6.4	4.3	2.9	-2.6	-18.5
Transportation Equipment	6.0	2.1	-2.2	-8.7	-18.3
Motor Veh. & Trailers	-0.3	-2.4	-6.0	-12.4	-19.8
Motor Veh. Parts & Acc.	4.3	2.9	3.2	4.0	3.0
Aircraft & Parts	0.5	0.4	-0.4	-0.7	-1.1
Railroad Rolling Stock	0.8	0.6	0.3	-0.2	-1.2
Shipbuilding	0.7	0.6	0.6	0.7	0.9
Misc. Trans. Equipment	0.0	0.0	0.0	-0.1	-0.2
Electrical Products	2.4	0.7	-2.1	-9.1	-23.0
Non-Metal Mineral Products	1.0	-0.3	-3.9	-11.1	-23.6

OUTPUT - REAL DOMESTIC PRODUCT
DURABLES MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.10	0.02	-0.13	-0.33	-0.57
Durables Manufacturing	0.15	0.07	-0.06	-0.24	-0.49
Wood Products	0.08	0.04	-0.02	-0.20	-0.44
Furniture & Fixtures	0.13	0.09	0.02	-0.07	-0.12
Primary Metals	0.10	-0.03	-0.26	-0.58	-0.99
Iron & Steel	0.20	0.03	-0.22	-0.56	-1.00
Primary Non-Ferr. Metals	-0.02	-0.11	-0.32	-0.60	-0.98
Metal Fabrication	0.26	0.19	0.06	-0.12	-0.36
Machinery	0.36	0.25	0.14	-0.09	-0.44
Transportation Equipment	0.13	0.04	-0.04	-0.13	-0.21
Motor Veh. & Trailers	-0.01	-0.11	-0.22	-0.40	-0.52
Motor Veh. Parts & Acc.	0.24	0.16	0.13	0.15	0.09
Aircraft & Parts	0.10	0.08	-0.06	-0.10	-0.12
Railroad Rolling Stock	0.85	0.77	0.25	-0.13	-0.58
Shipbuilding	0.55	0.48	0.47	0.41	0.36
Misc. Trans. Equipment	0.01	-0.01	-0.06	-0.13	-0.17
Electrical Products	0.09	0.03	-0.07	-0.27	-0.56
Non-Metal Mineral Products	0.09	-0.03	-0.30	-0.71	-1.23

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
Total Manufacturing	30.2	6.1	-47.6	-140.2	-295.8
Non-Durables Manufacturing	4.0	-5.1	-36.2	-82.0	-148.0
Food & Beverages	1.0	-0.4	-4.0	-8.1	-12.4
Meat Industry	-0.2	-0.5	-1.6	-3.4	-5.4
Dairy Industry	0.1	0.0	-0.2	-0.6	-0.8
Fish Processing Industry	0.0	0.0	-0.3	-0.8	-1.7
Grain Mills	0.1	0.0	-0.3	-0.5	-0.8
Other Food Products	0.8	0.0	-1.2	-2.4	-3.3
Alcoholic Beverages	0.2	0.0	-0.4	-0.4	-0.3
Tobacco Products	0.1	0.0	0.0	0.0	-0.1
Rubber Products	0.8	-0.1	-2.7	-6.6	-13.1
Leather Products	0.0	0.0	-0.2	-0.6	-1.3
Textiles	0.5	0.1	-1.4	-3.7	-6.7
Knitting & Clothing	0.1	0.0	-0.6	-1.6	-3.0
Paper & Allied Products	0.9	0.2	-2.2	-6.1	-11.7
Pulp & Paper	0.5	0.1	-1.4	-4.2	-8.2
Paper Converters	0.4	0.1	-0.8	-1.9	-3.5
Printing & Publishing	0.7	-0.3	-2.9	-6.9	-12.1
Petroleum & Coal Products	0.3	-0.8	-4.1	-8.5	-14.8
Chemicals & Chem. Products	-2.1	-4.9	-18.0	-36.7	-65.4
Industrial Chemicals	-2.1	-4.1	-13.1	-26.3	-46.4
Other Chemicals	0.0	-0.8	-4.8	-10.4	-19.1
Misc. Manuf. Industries	1.8	1.3	-0.3	-3.1	-7.4

OUTPUT - REAL DOMESTIC PRODUCT
NON-DURABLES MANUFACTURING GROUPS (I)
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			% Impact		
Total Manufacturing	0.10	0.02	-0.13	-0.33	-0.57
Non-Durables Manufacturing	0.03	-0.03	-0.22	-0.44	-0.68
Food & Beverages	0.03	-0.01	-0.11	-0.20	-0.26
Meat Industry	-0.03	-0.08	-0.27	-0.50	-0.67
Dairy Industry	0.02	0.01	-0.06	-0.13	-0.16
Fish Processing Industry	0.00	-0.01	-0.13	-0.35	-0.60
Grain Mills	0.04	0.00	-0.10	-0.18	-0.25
Other Food Products	0.06	0.00	-0.08	-0.14	-0.17
Alcoholic Beverages	0.03	0.01	-0.06	-0.06	-0.04
Tobacco Products	0.04	0.00	-0.03	-0.02	-0.27
Rubber Products	0.06	-0.01	-0.20	-0.41	-0.67
Leather Products	0.01	0.00	-0.12	-0.32	-0.60
Textiles	0.04	0.00	-0.12	-0.27	-0.41
Knitting & Clothing	0.01	0.00	-0.05	-0.13	-0.22
Paper & Allied Products	0.04	0.01	-0.08	-0.20	-0.32
Pulp & Paper	0.03	0.01	-0.07	-0.19	-0.31
Paper Converters	0.06	0.01	-0.10	-0.22	-0.34
Printing & Publishing	0.03	-0.02	-0.13	-0.26	-0.40
Petroleum & Coal Products	0.11	-0.37	-1.55	-2.97	-4.59
Chemicals & Chem. Products	-0.10	-0.22	-0.76	-1.32	-2.01
Industrial Chemicals	-0.35	-0.68	-1.97	-3.05	-4.37
Other Chemicals	0.00	-0.05	-0.28	-0.54	-0.87
Misc. Manuf. Industries	0.24	0.16	-0.03	-0.25	-0.47

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
Mining	-0.6	-1.9	-5.6	-9.8	-16.8
Metal Mines	-1.3	-2.0	-3.3	-4.8	-8.1
Coal	0.4	0.5	0.9	1.7	2.7
Petroleum & Gas	0.0	-0.3	-1.1	-2.6	-4.8
Non-Metal Mines	-0.1	-0.4	-1.8	-3.2	-4.7
Services	0.4	0.3	-0.2	-0.9	-2.0
Utilities	4.6	7.4	16.1	31.7	55.9
Electric Power	4.3	7.0	15.4	29.8	49.2
Gas Distribution	0.2	0.2	0.0	-0.2	-0.6
Water & Other Utilities	0.1	0.2	0.6	2.1	7.4
Transp., Storage & Comm.	8.3	7.1	0.9	-9.0	-13.6
Transportation	6.2	5.7	2.2	-2.0	-0.6
Air Transportation	0.6	0.3	-1.5	-4.9	-9.1
Railway Transportation	1.5	1.1	-0.3	-2.7	-6.2
Pipeline Transportation	0.5	0.4	-0.2	-0.9	-1.9
Urban Transportation	0.1	0.1	-0.2	-0.5	-0.7
Water Transportation	1.0	0.8	-0.2	-1.8	-4.2
Motor Transportation	2.5	3.0	4.6	8.8	21.4
Storage	0.2	0.2	0.0	-0.3	-0.6
Communications	1.9	1.3	-1.3	-6.7	-12.4
Broadcasting	0.4	0.3	-0.3	-1.4	-2.6
Telephone	1.3	0.9	-0.9	-4.8	-9.2
Post Office	0.2	0.1	-0.1	-0.4	-0.7
Trade	11.2	9.1	-0.6	-13.5	-22.0
Wholesale Trade	8.6	7.3	2.8	-3.5	-11.3
Retail Trade	2.6	1.7	-3.4	-10.0	-10.6
Services	4.5	3.4	-3.5	-16.5	-20.5
Education Services	0.7	0.5	0.0	-0.5	0.8
Health Services	0.4	0.7	1.5	4.0	13.5
Hotels & Restaurants	0.7	0.8	-2.3	-9.7	-15.5
Business Services	2.6	1.3	-1.5	-5.8	-11.6
Other Services	0.1	0.1	-1.3	-4.5	-7.7

OUTPUT - REAL DOMESTIC PRODUCT
OTHER NON-MANUFACTURING GROUPS
(Millions of Constant 1971 Dollars)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			% Impact		
Mining	-0.02	-0.05	-0.13	-0.19	-0.29
Metal Mines	-0.10	-0.14	-0.22	-0.29	-0.39
Coal	0.11	0.13	0.22	0.39	0.54
Petroleum & Gas	0.00	-0.02	-0.07	-0.13	-0.24
Non-Metal Mines	-0.02	-0.09	-0.34	-0.52	-0.60
Services	0.16	0.13	-0.07	-0.24	-0.47
Utilities	0.09	0.14	0.28	0.49	0.76
Electric Power	0.10	0.16	0.32	0.55	0.80
Gas Distribution	0.04	0.03	0.00	-0.03	-0.08
Water & Other Utilities	0.03	0.06	0.18	0.53	1.69
Transp., Storage & Comm.	0.05	0.04	0.01	-0.04	-0.06
Transportation	0.07	0.06	0.02	-0.02	0.00
Air Transportation	0.03	0.02	-0.07	-0.21	-0.34
Railway Transportation	0.07	0.05	-0.01	-0.09	-0.17
Pipeline Transportation	0.09	0.07	-0.03	-0.12	-0.21
Urban Transportation	0.02	0.02	-0.05	-0.14	-0.15
Water Transportation	0.13	0.10	-0.02	-0.17	-0.30
Motor Transportation	0.07	0.09	0.12	0.22	0.45
Storage	0.07	0.06	-0.01	-0.09	-0.14
Communications	0.03	0.02	-0.02	-0.08	-0.13
Broadcasting	0.06	0.04	-0.04	-0.15	-0.22
Telephone	0.02	0.02	-0.01	-0.07	-0.12
Post Office	0.04	0.02	-0.01	-0.06	-0.08
Trade	0.05	0.04	0.00	-0.06	-0.08
Wholesale Trade	0.09	0.08	0.03	-0.03	-0.09
Retail Trade	0.02	0.02	-0.03	-0.08	-0.07
Services	0.02	0.01	-0.01	-0.05	-0.05
Education Services	0.01	0.01	0.00	-0.01	0.01
Health Services	0.01	0.01	0.02	0.05	0.14
Hotels & Restaurants	0.02	0.02	-0.06	-0.20	-0.27
Business Services	0.04	0.02	-0.02	-0.08	-0.13
Other Services	0.00	0.00	-0.03	-0.08	-0.12

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
Population	0.0	0.0	0.0	0.0	0.0
Households	0.0	0.0	0.0	0.0	0.0
Labour Force	0.3	-0.1	-0.7	0.1	3.9
Civilian Source Population	0.0	0.0	0.0	0.0	0.0
Participation Rate (%)	0.00	0.00	0.00	0.00	0.02
Total Employment	4.2	4.3	1.6	-1.9	2.0
Agriculture	0.1	0.0	-0.3	-0.6	-1.1
Fisheries	0.0	0.0	-0.1	-0.2	-0.4
Forestry	0.0	0.0	0.0	-0.1	-0.2
Mining	0.0	0.0	-0.2	-0.4	-1.0
Manufacturing	1.7	1.7	0.2	-1.5	-4.4
Utilities	0.1	0.2	0.3	0.6	0.9
Construction	0.8	0.9	0.9	0.5	0.3
Transport, Storage & Comm.	0.1	0.2	0.2	0.3	1.1
Trade	0.5	0.4	0.0	-1.1	-1.7
Finance, Insur. & Real Est	0.1	0.1	-0.1	-0.3	-0.5
Services	0.6	0.6	-0.2	-1.5	0.2
Public Administration	0.2	0.3	0.7	2.4	8.6
Unemployment	-3.9	-4.4	-2.3	2.0	2.0
Unemployment Rate (%)	-0.03	-0.03	-0.02	0.01	0.01
Special Aggregations					
Goods-Producing	1.86	1.68	-0.30	-2.70	-7.01
Services	2.37	2.61	1.88	0.81	8.99
Private	1.94	2.07	0.70	-2.82	-4.72
Public	0.44	0.54	1.19	3.63	13.71

MAJOR ECONOMIC INDICATORS
LABOUR FORCE AND EMPLOYMENT
(Thousands)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			% Impact		
Population	0.00	0.00	0.00	0.00	0.00
Households	0.00	0.00	0.00	0.00	0.00
Labour Force	0.00	0.00	-0.01	0.00	0.02
Civilian Source Population	0.00	0.00	0.00	0.00	0.00
Total Employment	0.03	0.03	0.01	-0.01	0.01
Agriculture	0.03	0.01	-0.06	-0.11	-0.18
Fisheries	0.00	-0.01	-0.15	-0.32	-0.73
Forestry	0.01	0.02	0.00	-0.09	-0.24
Mining	-0.01	-0.02	-0.08	-0.19	-0.47
Manufacturing	0.08	0.08	0.01	-0.07	-0.21
Utilities	0.07	0.12	0.26	0.48	0.74
Construction	0.12	0.13	0.11	0.05	0.03
Transport, Storage & Comm.	0.02	0.03	0.03	0.04	0.13
Trade	0.02	0.02	0.00	-0.05	-0.07
Finance, Insur. & Real Est	0.01	0.01	-0.01	-0.04	-0.06
Services	0.01	0.01	0.00	-0.03	0.00
Public Administration	0.03	0.03	0.09	0.27	0.91
Unemployment	-0.35	-0.36	-0.19	0.16	0.19
Special Aggregations					
Goods-Producing	0.06	0.06	-0.01	-0.09	-0.23
Services	0.03	0.03	0.02	0.01	0.08
Private	0.03	0.03	0.01	-0.04	-0.06
Public	0.02	0.02	0.04	0.12	0.41

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
Paid Agriculture	0.1	0.0	-0.1	-0.2	-0.4
Other Than Paid Agriculture	0.1	0.0	-0.2	-0.3	-0.6
Forestry	0.0	0.0	0.0	-0.1	-0.2
Fishing & Trapping	0.0	0.0	-0.1	-0.2	-0.4
Mining	0.0	0.0	-0.2	-0.4	-1.0
Metal Mining	0.0	-0.1	-0.1	-0.1	-0.2
Coal Mining	0.0	0.0	0.0	0.1	0.1
Petroleum & Gas Mining	0.0	0.0	0.0	-0.1	-0.2
Non-metal Mining	0.0	0.0	0.0	-0.1	-0.1
Mining Services	0.0	0.0	0.0	-0.1	-0.6
Manufacturing	1.7	1.7	0.2	-1.5	-4.4
Food	0.1	0.0	-0.3	-0.4	-0.6
Tobacco	0.0	0.0	0.0	0.0	0.0
Rubber	0.0	0.0	-0.1	-0.3	-0.4
Leather	0.0	0.0	0.0	-0.1	-0.1
Textiles	0.0	0.0	0.0	-0.1	-0.1
Knitting & Clothing	0.0	0.0	0.0	-0.1	-0.2
Wood	0.1	0.1	0.0	-0.2	-0.5
Furniture & Fixtures	0.0	0.0	0.0	0.0	-0.1
Pulp & Paper	0.0	0.0	0.0	-0.1	-0.3
Paper Converters	0.0	0.0	0.0	-0.1	-0.2
Printing & Publishing	0.0	-0.1	-0.3	-0.4	-0.3
Primary Metals	0.3	0.4	0.7	1.1	1.4
Metal Fabricating	0.3	0.3	0.1	-0.2	-0.6
Machinery	0.2	0.2	0.1	-0.1	-0.5
Automobiles & Parts	0.3	0.2	0.2	-0.1	-0.4
Aircraft & Parts	0.0	0.0	0.0	0.0	0.0
Railroad Equip. & Misc.	0.1	0.1	0.1	0.1	-0.8
Shipbuilding	0.0	0.0	0.1	0.1	0.1
Electrical Products	0.1	0.1	-0.1	-0.3	-0.7
Non-metallic Minerals	0.1	0.2	0.2	0.6	1.0
Petroleum & Coal	0.1	0.1	0.1	0.2	0.3
Chemicals	0.1	0.0	-0.4	-0.8	-1.1
Miscellaneous	0.1	0.1	0.0	-0.2	-0.4

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			% Impact		
Paid Agriculture	0.02	0.01	-0.05	-0.09	-0.15
Other Than Paid Agriculture	0.03	0.01	-0.06	-0.11	-0.18
Forestry	0.02	0.02	0.00	-0.09	-0.24
Fishing & Trapping	0.00	-0.01	-0.15	-0.31	-0.71
Mining	-0.01	-0.02	-0.08	-0.20	-0.50
Metal Mining	-0.09	-0.14	-0.28	-0.40	-0.51
Coal Mining	0.05	0.09	0.20	0.41	0.62
Petroleum & Gas Mining	0.00	-0.01	-0.07	-0.16	-0.30
Non-metal Mining	0.00	-0.02	-0.16	-0.35	-0.47
Mining Services	0.04	0.06	0.02	-0.20	-0.84
Manufacturing	0.08	0.08	0.01	-0.08	-0.22
Food	0.04	0.01	-0.09	-0.14	-0.19
Tobacco	-0.02	-0.03	-0.05	-0.04	-0.15
Rubber	0.05	0.01	-0.21	-0.59	-1.06
Leather	0.01	0.00	-0.10	-0.38	-0.72
Textiles	-0.01	0.02	-0.02	-0.13	-0.29
Knitting & Clothing	0.00	0.00	-0.03	-0.09	-0.14
Wood	0.04	0.05	-0.03	-0.26	-0.57
Furniture & Fixtures	0.05	0.01	0.01	-0.04	-0.09
Pulp & Paper	0.01	0.01	-0.01	-0.11	-0.28
Paper Converters	0.02	0.02	-0.08	-0.26	-0.46
Printing & Publishing	-0.03	-0.09	-0.21	-0.30	-0.27
Primary Metals	0.27	0.41	0.70	1.16	1.51
Metal Fabricating	0.17	0.17	0.08	-0.09	-0.30
Machinery	0.20	0.20	0.12	-0.06	-0.36
Automobiles & Parts	0.16	0.16	0.10	-0.07	-0.26
Aircraft & Parts	0.03	0.02	-0.05	-0.08	-0.10
Railroad Equip. & Misc.	0.32	0.34	0.62	0.28	-3.56
Shipbuilding	0.27	0.39	0.50	0.53	0.57
Electrical Products	0.06	0.04	-0.05	-0.26	-0.58
Non-metallic Minerals	0.18	0.27	0.30	0.93	1.71
Petroleum & Coal	0.26	0.34	0.55	1.00	1.71
Chemicals	0.09	0.03	-0.46	-0.77	-1.05
Miscellaneous	0.10	0.11	0.01	-0.19	-0.39

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	0.8	0.9	0.9	0.5	0.3
Transportation	0.0	0.1	0.2	0.6	1.6
Air	0.0	0.0	0.0	0.0	0.0
Railway	0.0	0.0	0.0	0.0	0.0
Pipeline	0.0	0.0	0.0	0.0	0.0
Motor	0.0	0.1	0.3	0.7	1.7
Urban	0.0	0.0	0.0	0.0	0.0
Water	0.0	0.0	0.0	0.0	-0.1
Storage	0.0	0.0	0.0	0.0	0.0
Radio & T.V. Comm.	0.0	0.0	0.0	-0.1	-0.1
Telephone Comm.	0.0	0.0	0.0	-0.1	-0.1
Postal Comm.	0.0	0.0	0.0	-0.1	-0.2
Electric Utilities	0.1	0.1	0.3	0.6	0.9
Gas Distr. Util.	0.0	0.0	0.0	0.0	0.0
Water & Other Util.	0.0	0.0	0.0	0.0	0.1
Retail Trade	0.3	0.1	-0.2	-1.0	-1.2
Wholesale Trade	0.2	0.3	0.2	-0.1	-0.4
Finance, Ins. & R.E.	0.1	0.1	-0.1	-0.3	-0.5
Services	0.6	0.6	-0.2	-1.5	0.2
Religion	0.0	0.0	0.0	0.0	0.0
Recreation	0.0	0.0	-0.1	-0.5	-0.8
Business	0.3	0.1	-0.1	-0.5	-1.0
Personal	0.0	0.0	0.0	0.0	0.0
Accomodation & Food	0.1	0.1	-0.4	-1.7	-2.9
Miscellaneous	0.0	0.0	0.0	-0.1	-0.2
Education	0.1	0.1	0.0	-0.1	0.0
Hospital	0.1	0.2	0.5	1.4	5.1
Physicians	0.0	0.0	0.0	0.0	0.0
Federal Admin.	0.0	-0.1	-0.1	-0.2	-0.2
Provincial Admin.	0.1	0.1	0.1	0.0	-0.1
Municipal Admin.	0.1	0.3	0.8	2.6	8.8

EMPLOYMENT BY INDUSTRY
(Establishment Basis)
(thousands)

Scenario E, Sep 27	1989	1990	1993	1998	2005
			% Impact		
EMPLOYMENT BY INDUSTRY (continued)					
Construction	0.12	0.14	0.12	0.06	0.03
Transportation	0.01	0.02	0.05	0.12	0.31
Air	0.01	0.01	-0.03	-0.07	-0.08
Railway	0.01	0.03	0.02	0.00	-0.04
Pipeline	0.00	0.00	0.00	-0.01	-0.02
Motor	0.01	0.03	0.08	0.22	0.57
Urban	-0.03	-0.04	-0.09	-0.14	-0.04
Water	-0.01	0.04	0.05	-0.03	-0.18
Storage	0.02	0.03	0.02	-0.04	-0.13
Radio & T.V. Comm.	0.06	0.04	-0.04	-0.15	-0.24
Telephone Comm.	0.02	0.03	-0.01	-0.10	-0.12
Postal Comm.	0.04	0.03	-0.02	-0.08	-0.10
Electric Utilities	0.08	0.16	0.36	0.66	1.03
Gas Distr. Util.	0.04	0.03	0.00	-0.03	-0.08
Water & Other Util.	0.01	0.01	0.04	0.19	0.69
Retail Trade	0.02	0.01	-0.01	-0.06	-0.07
Wholesale Trade	0.04	0.05	0.04	-0.02	-0.07
Finance, Ins. & R.E.	0.01	0.01	-0.01	-0.04	-0.06
Services	0.01	0.01	0.00	-0.03	0.00
Religion	0.00	0.00	-0.01	-0.03	-0.03
Recreation	0.00	0.01	-0.04	-0.16	-0.25
Business	0.03	0.01	-0.02	-0.05	-0.10
Personal	0.00	0.01	0.01	0.01	0.00
Accomodation & Food	0.01	0.02	-0.04	-0.16	-0.22
Miscellaneous	0.00	0.00	-0.01	-0.03	-0.04
Education	0.01	0.01	0.00	-0.01	0.00
Hospital	0.02	0.03	0.06	0.16	0.55
Physicians	0.00	0.00	0.00	-0.01	-0.01
Federal Admin.	0.01	-0.03	-0.05	-0.06	-0.06
Provincial Admin.	0.03	0.04	0.02	-0.01	-0.02
Municipal Admin.	0.05	0.11	0.33	1.00	3.27

APPENDIX F

DETAILED ONTARIO RESULTS

Major Indicators for Ontario

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			Impact		
Gross Domestic Product ($71)					
Total	109.2	16.4	-231.9	-450.9	-433.6
Agriculture	1.4	-0.5	-2.0	-1.5	0.5
Resource Extraction	-2.3	-3.3	-6.0	-3.9	-5.8
Manufacturing	33.4	-26.3	-154.2	-242.1	-285.2
Electrical Products	4.4	1.0	-4.2	-12.7	-16.4
Motor Vehicles	-0.4	-5.1	-13.6	-18.3	-20.3
Parts & Accessories	10.6	6.3	6.9	3.8	3.0
Primary Metals	-2.6	-16.3	-45.1	-58.8	-73.7
Utilities	3.8	3.5	3.0	-0.9	3.5
Electrical	3.3	3.1	3.1	-0.4	2.0
Comm. & Personal Services	8.3	3.5	-19.7	-55.5	-45.2
Employment					
Total	8.5	6.3	-3.4	-15.9	-4.3
Agriculture	0.1	0.0	-0.2	-0.3	-0.2
Resource Extraction	-0.1	-0.1	-0.1	0.0	-0.1
Manufacturing	2.5	2.1	0.4	-1.9	-0.4
Durables	2.2	2.2	2.2	0.4	0.6
Nondurables	0.3	-0.1	-1.8	-2.3	-1.0
Utilities	0.1	0.1	0.1	0.1	0.1
Comm. & Personal Services	1.3	0.7	-1.8	-5.6	-0.9
GDP($71) per employed worker	0.5	-12.8	-36.0	-41.1	-59.8
Investment ($71)					
Nonresidential Structures	77.4	79.3	46.6	-26.7	-13.2
Manufacturing	51.4	55.8	42.7	-12.2	-4.7
Utilities	3.6	2.9	1.1	-3.6	-3.8
Machinery and Equipment	167.5	164.5	135.2	-31.8	-22.8
Residential Structures	4.9	6.1	-7.3	-19.6	3.9
Labour Force	3.5	1.7	-4.5	-10.8	-3.8
Households	0.6	1.1	-0.6	-7.9	-4.9
Unemployment	-5.0	-4.6	-1.1	5.1	0.5
Personal Income per Household ($K)	12.6	-6.9	-42.2	-42.3	-37.7
Labour Income per employed worker ($K)	-1.2	-8.0	-17.1	-14.6	-20.1
Dwelling Starts ('000)	0.4	0.5	-0.7	-1.2	0.6
Unemployment Rate (%)	-0.1	-0.1	0.0	0.1	0.0

Major Indicators for Ontario

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.18	0.03	-0.34	-0.58	-0.47
Agriculture	0.13	-0.05	-0.16	-0.12	0.03
Resource Extraction	-0.37	-0.50	-0.91	-0.56	-0.64
Manufacturing	0.19	-0.15	-0.74	-0.98	-0.94
Electrical Products	0.25	0.06	-0.21	-0.55	-0.58
Motor Vehicles	-0.02	-0.28	-0.58	-0.65	-0.58
Parts & Accessories	0.60	0.37	0.30	0.15	0.09
Primary Metals	-0.19	-1.24	-2.91	-3.22	-3.33
Utilities	0.22	0.20	0.16	-0.05	0.15
Electrical	0.25	0.23	0.22	-0.03	0.11
Comm. & Personal Services	0.07	0.03	-0.16	-0.40	-0.28
Employment					
Total	0.17	0.13	-0.06	-0.29	-0.07
Agriculture	0.10	0.01	-0.17	-0.19	-0.13
Resource Extraction	-0.19	-0.19	-0.29	-0.11	-0.29
Manufacturing	0.23	0.19	0.04	-0.17	-0.03
Durables	0.36	0.36	0.34	0.06	0.09
Nondurables	0.06	-0.02	-0.38	-0.49	-0.22
Utilities	0.16	0.18	0.23	0.10	0.23
Comm. & Personal Services	0.08	0.05	-0.10	-0.29	-0.04
GDP($71) per employed worker	0.00	-0.10	-0.27	-0.29	-0.40
Investment ($71)					
Nonresidential Structures	1.82	1.90	0.96	-0.46	-0.15
Manufacturing	11.48	12.72	7.59	-1.84	-0.61
Utilities	0.80	0.69	0.28	-0.85	-0.50
Machinery and Equipment	2.24	2.19	1.54	-0.30	-0.16
Residential Structures	0.18	0.23	-0.28	-0.78	0.15
Labour Force	0.07	0.03	-0.08	-0.19	-0.06
Households	0.02	0.03	-0.02	-0.20	-0.11
Unemployment	-1.82	-1.39	-0.38	1.64	0.26
Personal Income per Household ($K)	0.07	-0.04	-0.24	-0.23	-0.20
Labour Income per employed worker ($K)	-0.01	-0.10	-0.20	-0.17	-0.21

(a) Level Impact

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			Impact		
All Industries	109.2	16.4	-231.9	-450.9	-433.6
Agriculture	1.4	-0.5	-2.0	-1.5	0.5
Forestry	0.2	0.1	-0.3	-0.6	-0.6
Fishing	0.0	0.0	-0.1	-0.1	-0.1
Resource Extraction	-2.3	-3.3	-6.0	-3.9	-5.8
Metals	-2.8	-3.8	-5.7	-3.4	-5.3
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	0.5	0.5	-0.3	-0.4	-0.5
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	33.4	-26.3	-154.2	-242.1	-285.2
Durables	34.2	-6.0	-73.6	-138.9	-173.9
Nondurables	-0.8	-20.2	-80.6	-103.3	-111.2
Construction	29.4	30.1	13.4	-15.6	-0.7
Transport., Stor. & Comm.	9.9	3.6	-16.4	-38.1	-33.5
Transportation	6.5	3.3	-6.9	-18.2	-13.6
Storage	0.3	0.1	-0.4	-0.9	-0.9
Communication	3.2	0.2	-9.1	-19.0	-19.0
Utilities	3.8	3.5	3.0	-0.9	3.5
Trade	15.9	5.8	-26.1	-54.2	-48.6
Finance	6.8	-2.8	-30.5	-50.1	-52.2
Services	8.3	3.5	-19.7	-55.5	-45.2
Private	6.2	0.7	-20.3	-45.5	-43.8
Education	1.2	1.2	-0.4	-5.6	-2.5
Health	0.9	1.5	1.0	-4.5	1.1
Public Administration	2.3	2.7	6.9	11.8	34.3
Federal Admin.	0.3	-1.0	-1.8	-0.2	-0.5
Provincial Admin.	0.7	0.9	0.8	-0.3	0.1
Municipal Admin.	1.3	2.8	8.0	12.4	34.7

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.2	0.0	-0.3	-0.6	-0.5
Agriculture	0.1	0.0	-0.2	-0.1	0.0
Forestry	0.1	0.1	-0.2	-0.3	-0.3
Fishing	0.0	-0.1	-0.5	-0.8	-0.8
Resource Extraction	-0.4	-0.5	-0.9	-0.6	-0.6
Metals	-0.5	-0.7	-1.1	-0.6	-0.7
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	0.5	0.6	-0.3	-0.5	-0.3
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.2	-0.1	-0.7	-1.0	-0.9
Durables	0.3	-0.1	-0.6	-0.9	-0.9
Nondurables	0.0	-0.3	-1.0	-1.1	-1.0
Construction	1.1	1.1	0.5	-0.5	0.0
Transport., Stor. & Comm.	0.2	0.1	-0.3	-0.5	-0.4
Transportation	0.2	0.1	-0.2	-0.5	-0.3
Storage	0.2	0.1	-0.3	-0.6	-0.5
Communication	0.1	0.0	-0.3	-0.6	-0.5
Utilities	0.2	0.2	0.2	0.0	0.2
Trade	0.2	0.1	-0.3	-0.5	-0.4
Finance	0.1	0.0	-0.3	-0.5	-0.4
Services	0.1	0.0	-0.2	-0.4	-0.3
Private	0.1	0.0	-0.3	-0.6	-0.5
Education	0.0	0.0	0.0	-0.2	-0.1
Health	0.0	0.1	0.0	-0.1	0.0
Public Administration	0.1	0.1	0.2	0.3	0.8
Federal Admin.	0.0	-0.1	-0.1	0.0	0.0
Provincial Admin.	0.1	0.1	0.1	0.0	0.0
Municipal Admin.	0.2	0.3	0.9	1.3	3.3

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			Impact		
Total-All Manufacturing	33.4	-26.3	-154.2	-242.1	-285.2
Food And Beverages	0.0	-3.2	-10.6	-11.9	-12.0
Tobacco	0.1	0.0	0.0	0.1	0.1
Rubber	1.2	-0.4	-4.9	-7.2	-8.0
Leather	0.0	0.0	-0.3	-0.7	-0.8
Textiles	0.7	0.0	-2.3	-3.9	-4.0
Knitting & Clothing	0.1	0.0	-0.5	-0.9	-1.0
Wood	0.7	0.3	-0.3	-1.8	-2.3
Furniture	1.1	0.7	0.1	-0.9	-0.6
Pulp & Paper	0.4	-0.9	-4.1	-5.8	-5.7
Printing & Publishing	0.0	-2.4	-8.2	-11.0	-11.4
Primary Metals	-2.6	-16.3	-45.1	-58.8	-73.7
Metal Fabricating	8.6	5.2	-1.0	-13.0	-13.8
Machinery	12.2	8.1	5.0	-8.1	-15.5
Transportation Eqpt.-Total	11.9	2.4	-6.5	-15.4	-18.0
- Motor Vehicles	-0.4	-5.1	-13.6	-18.3	-20.3
- Parts & Accessories	10.6	6.3	6.9	3.8	3.0
- Aircraft & Parts	0.3	0.3	-0.3	-0.2	-0.1
- Railroad Rolling Stock	1.0	0.6	0.3	-0.5	-0.7
- Shipbuilding	0.4	0.3	0.3	0.1	0.3
- Miscellaneous	0.0	0.0	-0.1	-0.2	-0.2
Electrical Products	4.4	1.0	-4.2	-12.7	-16.4
Non-metallic Minerals	-2.0	-7.5	-21.6	-28.2	-33.7
Petroleum & Coal Products	-0.8	-3.1	-10.7	-13.0	-15.8
Chemicals	-5.6	-12.4	-38.4	-44.4	-48.2
Miscellaneous	3.1	2.1	-0.7	-4.5	-4.4
Durables	34.2	-6.0	-73.6	-138.9	-173.9
Nondurables	-0.8	-20.2	-80.6	-103.3	-111.2

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			% Impact		
Total-All Manufacturing	0.2	-0.1	-0.7	-1.0	-0.9
Food And Beverages	0.0	-0.2	-0.6	-0.7	-0.6
Tobacco	0.1	0.0	-0.1	0.1	0.3
Rubber	0.2	0.0	-0.6	-0.7	-0.6
Leather	0.0	0.0	-0.3	-0.6	-0.6
Textiles	0.1	0.0	-0.3	-0.5	-0.4
Knitting & Clothing	0.0	0.0	-0.1	-0.2	-0.2
Wood	0.2	0.1	-0.1	-0.5	-0.5
Furniture	0.4	0.2	0.0	-0.2	-0.1
Pulp & Paper	0.1	-0.1	-0.4	-0.5	-0.4
Printing & Publishing	0.0	-0.2	-0.7	-0.8	-0.7
Primary Metals	-0.2	-1.2	-2.9	-3.2	-3.3
Metal Fabricating	0.7	0.4	-0.1	-0.7	-0.6
Machinery	1.0	0.7	0.3	-0.4	-0.5
Transportation Eqpt.-Total	0.3	0.1	-0.1	-0.3	-0.3
- Motor Vehicles	0.0	-0.3	-0.6	-0.6	-0.6
- Parts & Accessories	0.6	0.4	0.3	0.1	0.1
- Aircraft & Parts	0.3	0.2	-0.2	-0.1	0.0
- Railroad Rolling Stock	2.1	1.8	0.6	-0.7	-0.7
- Shipbuilding	1.5	1.3	1.2	0.2	0.5
- Miscellaneous	0.0	0.0	-0.2	-0.2	-0.1
Electrical Products	0.2	0.1	-0.2	-0.5	-0.6
Non-metallic Minerals	-0.3	-1.3	-3.1	-3.4	-3.2
Petroleum & Coal Products	-0.8	-3.2	-9.0	-9.7	-10.1
Chemicals	-0.4	-1.0	-2.8	-2.8	-2.6
Miscellaneous	0.7	0.4	-0.1	-0.6	-0.4
Durables	0.3	-0.1	-0.6	-0.9	-0.9
Nondurables	0.0	-0.3	-1.0	-1.1	-1.0

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			Impact		
All Industries	8.5	6.3	-3.4	-15.9	-4.3
Agriculture	0.1	0.0	-0.2	-0.3	-0.2
Forestry	0.0	0.0	0.0	0.0	0.0
Fishing	0.0	0.0	0.0	0.0	0.0
Mineral Resources	-0.1	-0.1	-0.1	0.0	-0.1
Manufacturing	2.5	2.1	0.4	-1.9	-0.4
Durables	2.2	2.2	2.2	0.4	0.6
Nondurables	0.3	-0.1	-1.8	-2.3	-1.0
Construction	2.8	3.0	1.6	-1.6	0.0
Transport. & Stor. & Comm.	0.2	0.0	-0.5	-0.9	-0.4
Transportation & Storage	0.1	-0.1	-0.3	-0.3	0.1
Communications	0.1	0.1	-0.2	-0.6	-0.5
Utilities	0.1	0.1	0.1	0.1	0.1
Trade	0.9	0.1	-2.7	-5.2	-4.3
Finance	0.2	-0.1	-1.1	-1.7	-1.6
Services	1.3	0.7	-1.8	-5.6	-0.9
Private Commercial	0.9	0.2	-2.6	-5.9	-4.0
Education	0.1	0.1	-0.1	-0.7	-0.4
Health	0.2	0.4	0.9	1.1	3.5
Public Administration	0.4	0.5	1.0	1.3	3.5
Federal Admin.	0.0	-0.1	-0.1	0.0	0.0
Provincial Admin.	0.2	0.2	0.2	0.0	0.0
Municipal Admin.	0.1	0.3	0.9	1.3	3.5

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.2	0.1	-0.1	-0.3	-0.1
Agriculture	0.1	0.0	-0.2	-0.2	-0.1
Forestry	0.0	0.1	-0.1	-0.4	-0.6
Fishing	0.0	-0.1	-0.5	-0.6	-0.8
Mineral Resources	-0.2	-0.2	-0.3	-0.1	-0.3
Manufacturing	0.2	0.2	0.0	-0.2	0.0
Durables	0.4	0.4	0.3	0.1	0.1
Nondurables	0.1	0.0	-0.4	-0.5	-0.2
Construction	1.1	1.2	0.5	-0.5	0.0
Transport. & Stor. & Comm.	0.1	0.0	-0.2	-0.4	-0.1
Transportation & Storage	0.1	0.0	-0.2	-0.3	0.0
Communications	0.1	0.1	-0.2	-0.5	-0.3
Utilities	0.2	0.2	0.2	0.1	0.2
Trade	0.1	0.0	-0.3	-0.5	-0.4
Finance	0.1	0.0	-0.3	-0.5	-0.4
Services	0.1	0.0	-0.1	-0.3	0.0
Private Commercial	0.1	0.0	-0.3	-0.5	-0.3
Education	0.0	0.0	0.0	-0.2	-0.1
Health	0.1	0.1	0.2	0.2	0.7
Public Administration	0.1	0.2	0.3	0.4	1.1
Federal Admin.	0.0	-0.1	-0.1	0.0	0.0
Provincial Admin.	0.3	0.3	0.3	-0.1	0.0
Municipal Admin.	0.2	0.3	0.9	1.2	3.0

Major Indicators for Ontario

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			Impact		
Gross Domestic Product ($71)					
Total	214.2	97.2	-207.6	-556.7	-564.5
Agriculture	2.4	-0.6	-2.5	-2.8	-1.4
Resource Extraction	-3.0	-4.2	-7.6	-4.7	-6.8
Manufacturing	81.1	3.4	-148.7	-280.6	-333.8
Electrical Products	9.5	4.4	-2.5	-16.8	-21.5
Motor Vehicles	-7.0	-20.8	-43.6	-52.6	-48.9
Parts & Accessories	28.8	29.2	38.1	33.0	26.9
Primary Metals	3.0	-12.4	-42.0	-58.1	-74.1
Utilities	5.2	3.5	-0.9	-8.1	-4.1
Electrical	4.4	2.8	-0.6	-6.7	-3.7
Comm. & Personal Services	14.9	9.5	-18.4	-72.1	-65.0
Employment					
Total	14.9	12.7	0.1	-22.0	-11.4
Agriculture	0.2	0.0	-0.3	-0.5	-0.4
Resource Extraction	-0.1	-0.1	-0.2	-0.1	-0.2
Manufacturing	4.6	4.0	1.4	-2.8	-0.9
Durables	4.0	3.9	3.4	0.3	0.9
Nondurables	0.6	0.1	-2.0	-3.1	-1.7
Utilities	0.1	0.1	0.1	-0.1	0.0
Comm. & Personal Services	2.3	1.8	-1.2	-7.5	-3.2
GDP($71) per employed worker	5.4	-12.6	-40.2	-44.7	-63.6
Investment ($71)					
Nonresidential Structures	116.3	122.8	85.8	-30.7	-14.8
Manufacturing	71.6	79.3	68.4	-11.6	-5.2
Utilities	9.3	8.1	5.2	-4.6	-4.5
Machinery and Equipment	334.5	326.3	285.4	-14.2	-8.4
Residential Structures	10.2	15.1	-1.0	-26.2	5.1
Labour Force	6.8	5.4	-1.7	-12.4	-4.8
Households	1.2	2.5	1.9	-8.1	-5.1
Unemployment	-8.1	-7.3	-1.8	9.6	6.6
Personal Income per Household ($K)	26.5	0.6	-47.3	-56.9	-60.4
Labour Income per employed worker ($K)	0.3	-8.4	-19.2	-16.5	-26.7
Dwelling Starts ('000)	0.9	1.2	-0.3	-1.8	0.8
Unemployment Rate (%)	-0.2	-0.1	0.0	0.2	0.1

Major Indicators for Ontario

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.35	0.16	-0.30	-0.71	-0.61
Agriculture	0.22	-0.05	-0.21	-0.22	-0.09
Resource Extraction	-0.49	-0.64	-1.15	-0.68	-0.75
Manufacturing	0.45	0.02	-0.71	-1.14	-1.10
Electrical Products	0.54	0.25	-0.13	-0.72	-0.75
Motor Vehicles	-0.37	-1.13	-1.86	-1.87	-1.40
Parts & Accessories	1.62	1.70	1.64	1.26	0.84
Primary Metals	0.22	-0.95	-2.70	-3.18	-3.35
Utilities	0.30	0.20	-0.05	-0.40	-0.18
Electrical	0.33	0.21	-0.04	-0.43	-0.21
Comm. & Personal Services	0.13	0.08	-0.15	-0.52	-0.41
Employment					
Total	0.30	0.26	0.00	-0.40	-0.19
Agriculture	0.17	0.03	-0.22	-0.32	-0.26
Resource Extraction	-0.25	-0.26	-0.46	-0.24	-0.45
Manufacturing	0.42	0.37	0.13	-0.25	-0.08
Durables	0.64	0.63	0.53	0.04	0.13
Nondurables	0.12	0.02	-0.42	-0.65	-0.38
Utilities	0.23	0.22	0.15	-0.11	0.05
Comm. & Personal Services	0.14	0.11	-0.07	-0.38	-0.14
GDP($71) per employed worker	0.04	-0.10	-0.31	-0.32	-0.42
Investment ($71)					
Nonresidential Structures	2.73	2.95	1.77	-0.52	-0.17
Manufacturing	15.98	18.08	12.18	-1.75	-0.67
Utilities	2.10	1.96	1.29	-1.11	-0.59
Machinery and Equipment	4.48	4.35	3.24	-0.13	-0.06
Residential Structures	0.37	0.57	-0.04	-1.04	0.20
Labour Force	0.13	0.10	-0.03	-0.21	-0.08
Households	0.03	0.07	0.05	-0.20	-0.12
Unemployment	-2.96	-2.23	-0.61	3.12	3.46
Personal Income per Household ($K)	0.16	0.00	-0.27	-0.31	-0.31
Labour Income per employed worker ($K)	0.00	-0.10	-0.23	-0.19	-0.28

(a) Level Impact

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			Impact		
All Industries	214.2	97.2	-207.6	-556.7	-564.5
Agriculture	2.4	-0.6	-2.5	-2.8	-1.4
Forestry	0.3	0.2	-0.4	-0.9	-1.0
Fishing	0.0	0.0	-0.1	-0.1	-0.1
Resource Extraction	-3.0	-4.2	-7.6	-4.7	-6.8
Metals	-4.1	-5.4	-7.6	-4.1	-6.1
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	1.1	1.3	0.0	-0.7	-0.6
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	81.1	3.4	-148.7	-280.6	-333.8
Durables	75.5	21.8	-58.5	-155.9	-198.4
Nondurables	5.6	-18.3	-90.3	-124.7	-135.4
Construction	45.7	49.2	29.6	-19.9	-1.7
Transport., Stor. & Comm.	18.5	10.4	-15.0	-49.7	-48.6
Transportation	11.5	7.1	-6.6	-25.3	-23.0
Storage	0.5	0.3	-0.3	-1.1	-1.1
Communication	6.5	2.9	-8.1	-23.3	-24.4
Utilities	5.2	3.5	-0.9	-8.1	-4.1
Trade	30.7	18.7	-20.1	-65.3	-61.5
Finance	16.2	5.3	-26.7	-57.1	-58.2
Services	14.9	9.5	-18.4	-72.1	-65.0
Private	11.7	4.7	-21.6	-59.4	-59.0
Education	1.8	2.1	0.7	-6.9	-4.3
Health	1.4	2.6	2.4	-5.9	-1.7
Public Administration	2.2	1.8	3.1	4.8	17.7
Federal Admin.	0.5	-1.3	-2.6	-0.2	0.1
Provincial Admin.	0.8	1.0	0.8	-0.8	-0.6
Municipal Admin.	0.9	2.0	4.9	5.8	18.1

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.3	0.2	-0.3	-0.7	-0.6
Agriculture	0.2	-0.1	-0.2	-0.2	-0.1
Forestry	0.2	0.1	-0.2	-0.5	-0.4
Fishing	0.0	0.0	-0.6	-1.1	-1.0
Resource Extraction	-0.5	-0.6	-1.2	-0.7	-0.8
Metals	-0.8	-1.0	-1.4	-0.7	-0.9
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	1.2	1.4	0.0	-0.7	-0.5
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.5	0.0	-0.7	-1.1	-1.1
Durables	0.7	0.2	-0.5	-1.0	-1.0
Nondurables	0.1	-0.3	-1.1	-1.4	-1.3
Construction	1.7	1.8	1.0	-0.6	0.0
Transport., Stor. & Comm.	0.3	0.2	-0.2	-0.7	-0.6
Transportation	0.4	0.2	-0.2	-0.7	-0.5
Storage	0.4	0.3	-0.3	-0.8	-0.6
Communication	0.3	0.1	-0.3	-0.7	-0.6
Utilities	0.3	0.2	0.0	-0.4	-0.2
Trade	0.4	0.2	-0.2	-0.6	-0.5
Finance	0.2	0.1	-0.3	-0.5	-0.5
Services	0.1	0.1	-0.1	-0.5	-0.4
Private	0.2	0.1	-0.3	-0.8	-0.6
Education	0.1	0.1	0.0	-0.2	-0.1
Health	0.1	0.1	0.1	-0.2	0.0
Public Administration	0.1	0.1	0.1	0.1	0.4
Federal Admin.	0.0	-0.1	-0.1	0.0	0.0
Provincial Admin.	0.1	0.1	0.1	-0.1	-0.1
Municipal Admin.	0.1	0.3	0.6	0.6	1.7

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			Impact		
Total-All Manufacturing	81.1	3.4	-148.7	-280.6	-333.8
Food And Beverages	1.0	-2.7	-11.4	-13.8	-14.6
Tobacco	0.1	0.0	-0.1	0.0	-0.3
Rubber	2.5	0.2	-5.6	-9.4	-10.2
Leather	0.1	0.0	-0.4	-0.9	-1.0
Textiles	1.1	-0.1	-3.7	-6.3	-6.4
Knitting & Clothing	0.1	0.1	-0.6	-1.3	-1.5
Wood	1.0	0.4	-0.3	-2.6	-3.3
Furniture	2.1	1.4	0.6	-1.3	-1.1
Pulp & Paper	0.9	-0.8	-4.9	-7.7	-7.9
Printing & Publishing	0.7	-2.5	-9.6	-13.8	-14.6
Primary Metals	3.0	-12.4	-42.0	-58.1	-74.1
Metal Fabricating	13.7	8.8	1.2	-15.4	-17.5
Machinery	18.3	11.9	8.0	-11.1	-21.9
Transportation Eqpt.-Total	28.8	14.4	-1.0	-20.3	-22.7
- Motor Vehicles	-7.0	-20.8	-43.6	-52.6	-48.9
- Parts & Accessories	28.8	29.2	38.1	33.0	26.9
- Aircraft & Parts	0.6	0.5	-0.2	-0.4	-0.2
- Railroad Rolling Stock	5.7	5.0	4.5	-0.1	-0.5
- Shipbuilding	0.6	0.5	0.4	0.1	0.3
- Miscellaneous	0.0	0.0	-0.1	-0.3	-0.2
Electrical Products	9.5	4.4	-2.5	-16.8	-21.5
Non-metallic Minerals	-0.9	-7.1	-22.4	-30.4	-36.4
Petroleum & Coal Products	-1.0	-3.8	-13.3	-16.1	-19.9
Chemicals	-5.3	-12.3	-40.7	-49.3	-53.2
Miscellaneous	5.3	3.7	0.0	-5.9	-5.8
Durables	75.5	21.8	-58.5	-155.9	-198.4
Nondurables	5.6	-18.3	-90.3	-124.7	-135.4

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			% Impact		
Total-All Manufacturing	0.5	0.0	-0.7	-1.1	-1.1
Food And Beverages	0.1	-0.2	-0.7	-0.8	-0.7
Tobacco	0.2	0.0	-0.2	-0.1	-1.4
Rubber	0.3	0.0	-0.6	-0.9	-0.8
Leather	0.1	0.0	-0.4	-0.8	-0.9
Textiles	0.2	0.0	-0.5	-0.8	-0.7
Knitting & Clothing	0.0	0.0	-0.2	-0.3	-0.4
Wood	0.3	0.1	-0.1	-0.7	-0.7
Furniture	0.6	0.4	0.2	-0.3	-0.2
Pulp & Paper	0.1	-0.1	-0.5	-0.7	-0.6
Printing & Publishing	0.1	-0.2	-0.8	-1.0	-0.9
Primary Metals	0.2	-0.9	-2.7	-3.2	-3.3
Metal Fabricating	1.1	0.7	0.1	-0.8	-0.7
Machinery	1.5	1.0	0.5	-0.6	-0.8
Transportation Eqpt.-Total	0.7	0.4	0.0	-0.3	-0.3
- Motor Vehicles	-0.4	-1.1	-1.9	-1.9	-1.4
- Parts & Accessories	1.6	1.7	1.6	1.3	0.8
- Aircraft & Parts	0.5	0.4	-0.2	-0.2	-0.1
- Railroad Rolling Stock	12.0	13.8	7.4	-0.1	-0.5
- Shipbuilding	2.4	2.0	1.9	0.2	0.6
- Miscellaneous	0.1	0.0	-0.2	-0.3	-0.2
Electrical Products	0.5	0.2	-0.1	-0.7	-0.8
Non-metallic Minerals	-0.1	-1.2	-3.2	-3.7	-3.4
Petroleum & Coal Products	-0.9	-4.0	-11.3	-12.1	-12.6
Chemicals	-0.4	-0.9	-2.9	-3.1	-2.9
Miscellaneous	1.1	0.7	0.0	-0.8	-0.6
Durables	0.7	0.2	-0.5	-1.0	-1.0
Nondurables	0.1	-0.3	-1.1	-1.4	-1.3

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			Impact		
All Industries	14.9	12.7	0.1	-22.0	-11.4
Agriculture	0.2	0.0	-0.3	-0.5	-0.4
Forestry	0.0	0.0	0.0	0.0	-0.1
Fishing	0.0	0.0	0.0	0.0	0.0
Mineral Resources	-0.1	-0.1	-0.2	-0.1	-0.2
Manufacturing	4.6	4.0	1.4	-2.8	-0.9
Durables	4.0	3.9	3.4	0.3	0.9
Nondurables	0.6	0.1	-2.0	-3.1	-1.7
Construction	4.3	4.8	3.2	-2.1	-0.2
Transport. & Stor. & Comm.	0.5	0.3	-0.4	-1.3	-1.1
Transportation & Storage	0.2	0.1	-0.3	-0.6	-0.4
Communications	0.2	0.2	-0.2	-0.8	-0.7
Utilities	0.1	0.1	0.1	-0.1	0.0
Trade	2.1	1.2	-2.0	-6.1	-5.4
Finance	0.6	0.2	-0.9	-2.0	-1.8
Services	2.3	1.8	-1.2	-7.5	-3.2
Private Commercial	1.8	1.1	-2.2	-7.3	-5.2
Education	0.2	0.3	0.1	-0.9	-0.6
Health	0.3	0.5	0.9	0.7	2.6
Public Administration	0.4	0.4	0.6	0.5	1.8
Federal Admin.	0.0	-0.1	-0.2	0.0	0.0
Provincial Admin.	0.2	0.3	0.2	-0.1	0.0
Municipal Admin.	0.1	0.2	0.5	0.6	1.8

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.3	0.3	0.0	-0.4	-0.2
Agriculture	0.2	0.0	-0.2	-0.3	-0.3
Forestry	0.0	0.1	-0.1	-0.6	-0.8
Fishing	0.0	0.0	-0.5	-0.8	-1.0
Mineral Resources	-0.2	-0.3	-0.5	-0.2	-0.4
Manufacturing	0.4	0.4	0.1	-0.3	-0.1
Durables	0.6	0.6	0.5	0.0	0.1
Nondurables	0.1	0.0	-0.4	-0.7	-0.4
Construction	1.7	1.9	1.1	-0.6	0.0
Transport. & Stor. & Comm.	0.2	0.1	-0.2	-0.5	-0.4
Transportation & Storage	0.2	0.1	-0.2	-0.5	-0.3
Communications	0.2	0.1	-0.2	-0.6	-0.5
Utilities	0.2	0.2	0.2	-0.1	0.1
Trade	0.2	0.1	-0.2	-0.6	-0.5
Finance	0.2	0.1	-0.3	-0.6	-0.5
Services	0.1	0.1	-0.1	-0.4	-0.1
Private Commercial	0.2	0.1	-0.2	-0.6	-0.4
Education	0.1	0.1	0.0	-0.3	-0.2
Health	0.1	0.1	0.2	0.2	0.5
Public Administration	0.1	0.1	0.2	0.2	0.5
Federal Admin.	0.0	-0.1	-0.2	0.0	0.0
Provincial Admin.	0.3	0.3	0.3	-0.1	0.0
Municipal Admin.	0.1	0.2	0.5	0.6	1.6

Major Indicators for Ontario

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			Impact		
Gross Domestic Product ($71)					
Total	68.9	-1.7	-194.9	-366.5	-390.8
Agriculture	1.1	-0.3	-1.4	-1.1	0.2
Resource Extraction	-1.7	-2.3	-3.7	-1.8	-2.5
Manufacturing	20.1	-24.8	-123.3	-192.1	-230.0
Electrical Products	2.7	0.2	-3.8	-9.7	-12.1
Motor Vehicles	-0.5	-4.0	-10.4	-13.7	-15.1
Parts & Accessories	7.6	4.7	5.1	3.0	2.4
Primary Metals	-5.9	-19.8	-51.5	-65.0	-82.8
Utilities	3.1	3.3	4.1	1.0	2.9
Electrical	2.9	3.3	4.7	2.3	3.9
Comm. & Personal Services	5.3	1.5	-16.6	-44.5	-43.3
Employment					
Total	5.7	4.1	-3.4	-13.9	-9.5
Agriculture	0.1	0.0	-0.2	-0.2	-0.1
Resource Extraction	-0.1	-0.1	-0.2	-0.1	-0.2
Manufacturing	2.0	1.9	1.5	-0.1	1.0
Durables	1.7	1.7	2.2	1.1	1.5
Nondurables	0.3	0.2	-0.7	-1.2	-0.5
Utilities	0.1	0.1	0.1	0.0	0.1
Comm. & Personal Services	0.8	0.3	-2.1	-5.9	-4.8
GDP($71) per employed worker	-0.5	-10.8	-28.9	-31.0	-40.0
Investment ($71)					
Nonresidential Structures	51.0	52.0	28.2	-20.4	-12.1
Manufacturing	36.6	39.7	30.9	-8.6	-3.5
Utilities	0.1	-0.2	-1.0	-2.3	-2.6
Machinery and Equipment	119.7	118.1	96.0	-26.2	-21.2
Residential Structures	3.1	3.6	-6.5	-15.2	1.0
Labour Force	2.2	0.7	-4.4	-9.6	-6.0
Households	0.4	0.7	-0.8	-6.3	-4.9
Unemployment	-3.5	-3.3	-1.0	4.3	3.6
Personal Income per Household ($K)	7.8	-6.7	-34.5	-35.9	-38.8
Labour Income per employed worker ($K)	-1.3	-6.7	-14.7	-12.5	-17.8
Dwelling Starts ('000)	0.3	0.3	-0.6	-0.9	0.4
Unemployment Rate (%)	-0.1	-0.1	0.0	0.1	0.1

Major Indicators for Ontario

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.11	0.00	-0.28	-0.47	-0.42
Agriculture	0.10	-0.03	-0.12	-0.08	0.02
Resource Extraction	-0.28	-0.35	-0.56	-0.26	-0.28
Manufacturing	0.11	-0.14	-0.59	-0.78	-0.76
Electrical Products	0.15	0.01	-0.19	-0.42	-0.42
Motor Vehicles	-0.03	-0.22	-0.44	-0.49	-0.43
Parts & Accessories	0.43	0.28	0.22	0.12	0.08
Primary Metals	-0.44	-1.51	-3.32	-3.56	-3.74
Utilities	0.18	0.19	0.22	0.05	0.12
Electrical	0.22	0.24	0.33	0.15	0.22
Comm. & Personal Services	0.05	0.01	-0.13	-0.32	-0.27
Employment					
Total	0.12	0.08	-0.06	-0.25	-0.15
Agriculture	0.07	0.01	-0.12	-0.13	-0.08
Resource Extraction	-0.19	-0.21	-0.39	-0.29	-0.42
Manufacturing	0.18	0.18	0.13	-0.01	0.09
Durables	0.26	0.28	0.33	0.17	0.22
Nondurables	0.07	0.04	-0.15	-0.26	-0.10
Utilities	0.12	0.15	0.20	0.08	0.11
Comm. & Personal Services	0.05	0.02	-0.12	-0.30	-0.21
GDP($71) per employed worker	0.00	-0.09	-0.22	-0.22	-0.26
Investment ($71)					
Nonresidential Structures	1.20	1.25	0.58	-0.35	-0.14
Manufacturing	8.17	9.06	5.50	-1.29	-0.46
Utilities	0.02	-0.05	-0.26	-0.56	-0.34
Machinery and Equipment	1.60	1.57	1.09	-0.25	-0.14
Residential Structures	0.12	0.14	-0.25	-0.61	0.04
Labour Force	0.04	0.01	-0.08	-0.16	-0.09
Households	0.01	0.02	-0.02	-0.16	-0.11
Unemployment	-1.28	-1.02	-0.34	1.39	1.87
Personal Income per Household ($K)	0.05	-0.04	-0.20	-0.20	-0.20
Labour Income per employed worker ($K)	-0.02	-0.08	-0.18	-0.14	-0.19

(a) Level Impact

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			Impact		
All Industries	68.9	-1.7	-194.9	-366.5	-390.8
Agriculture	1.1	-0.3	-1.4	-1.1	0.2
Forestry	0.1	0.1	-0.2	-0.5	-0.5
Fishing	0.0	0.0	0.0	-0.1	-0.1
Resource Extraction	-1.7	-2.3	-3.7	-1.8	-2.5
Metals	-1.8	-2.4	-3.3	-1.5	-2.3
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	0.1	0.1	-0.4	-0.3	-0.3
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	20.1	-24.8	-123.3	-192.1	-230.0
Durables	18.5	-15.0	-77.5	-129.5	-162.7
Nondurables	1.6	-9.8	-45.8	-62.6	-67.2
Construction	19.4	19.5	7.1	-12.4	-3.0
Transport., Stor. & Comm.	6.4	1.6	-14.1	-31.5	-32.7
Transportation	4.3	1.8	-6.2	-15.5	-15.3
Storage	0.2	0.1	-0.3	-0.7	-0.8
Communication	1.9	-0.3	-7.5	-15.2	-16.6
Utilities	3.1	3.3	4.1	1.0	2.9
Trade	10.3	2.8	-21.8	-43.7	-43.6
Finance	3.8	-3.6	-25.0	-39.8	-42.6
Services	5.3	1.5	-16.6	-44.5	-43.3
Private	4.0	0.0	-15.3	-34.2	-35.8
Education	0.8	0.7	-1.0	-5.3	-4.2
Health	0.6	0.8	-0.3	-5.0	-3.3
Public Administration	1.1	0.6	0.2	0.0	4.4
Federal Admin.	0.2	-0.7	-1.5	-0.3	0.2
Provincial Admin.	0.6	0.7	0.6	-0.4	-0.3
Municipal Admin.	0.3	0.6	1.1	0.7	4.6

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.1	0.0	-0.3	-0.5	-0.4
Agriculture	0.1	0.0	-0.1	-0.1	0.0
Forestry	0.1	0.1	-0.1	-0.3	-0.2
Fishing	0.0	0.0	-0.4	-0.6	-0.5
Resource Extraction	-0.3	-0.3	-0.6	-0.3	-0.3
Metals	-0.4	-0.5	-0.6	-0.3	-0.3
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	0.1	0.2	-0.4	-0.3	-0.2
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.1	-0.1	-0.6	-0.8	-0.8
Durables	0.2	-0.1	-0.6	-0.8	-0.8
Nondurables	0.0	-0.1	-0.6	-0.7	-0.6
Construction	0.7	0.7	0.2	-0.4	-0.1
Transport., Stor. & Comm.	0.1	0.0	-0.2	-0.4	-0.4
Transportation	0.1	0.1	-0.2	-0.4	-0.3
Storage	0.2	0.0	-0.3	-0.5	-0.4
Communication	0.1	0.0	-0.3	-0.5	-0.4
Utilities	0.2	0.2	0.2	0.0	0.1
Trade	0.1	0.0	-0.2	-0.4	-0.4
Finance	0.0	0.0	-0.3	-0.4	-0.3
Services	0.0	0.0	-0.1	-0.3	-0.3
Private	0.1	0.0	-0.2	-0.4	-0.4
Education	0.0	0.0	0.0	-0.2	-0.1
Health	0.0	0.0	0.0	-0.2	-0.1
Public Administration	0.0	0.0	0.0	0.0	0.1
Federal Admin.	0.0	0.0	-0.1	0.0	0.0
Provincial Admin.	0.1	0.1	0.1	0.0	0.0
Municipal Admin.	0.0	0.1	0.1	0.1	0.4

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			Impact		
Total-All Manufacturing	20.1	-24.8	-123.3	-192.1	-230.0
Food And Beverages	0.4	-1.4	-5.6	-6.9	-7.5
Tobacco	0.1	0.0	0.0	0.0	-0.2
Rubber	0.9	-0.1	-3.1	-4.8	-5.2
Leather	0.0	0.0	-0.2	-0.5	-0.6
Textiles	0.5	0.0	-1.6	-2.9	-3.1
Knitting & Clothing	0.0	0.0	-0.4	-0.7	-0.8
Wood	0.5	0.2	-0.2	-1.3	-1.7
Furniture	0.8	0.5	0.0	-0.8	-0.6
Pulp & Paper	0.0	-1.2	-4.4	-6.0	-6.3
Printing & Publishing	0.4	-0.9	-3.9	-5.9	-6.1
Primary Metals	-5.9	-19.8	-51.5	-65.0	-82.8
Metal Fabricating	5.3	2.7	-2.1	-11.2	-11.6
Machinery	8.9	6.1	3.5	-6.2	-11.9
Transportation Eqpt.-Total	8.4	1.7	-5.1	-11.5	-13.4
- Motor Vehicles	-0.5	-4.0	-10.4	-13.7	-15.1
- Parts & Accessories	7.6	4.7	5.1	3.0	2.4
- Aircraft & Parts	0.2	0.2	-0.2	-0.2	-0.1
- Railroad Rolling Stock	0.8	0.5	0.3	-0.5	-0.6
- Shipbuilding	0.3	0.2	0.2	0.0	0.1
- Miscellaneous	0.0	0.0	-0.1	-0.2	-0.1
Electrical Products	2.7	0.2	-3.8	-9.7	-12.1
Non-metallic Minerals	-2.1	-6.6	-18.3	-23.7	-28.6
Petroleum & Coal Products	-0.2	-1.4	-5.2	-6.6	-8.0
Chemicals	-2.8	-6.4	-20.9	-25.0	-26.5
Miscellaneous	2.2	1.5	-0.4	-3.3	-3.1
Durables	18.5	-15.0	-77.5	-129.5	-162.7
Nondurables	1.6	-9.8	-45.8	-62.6	-67.2

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			% Impact		
Total-All Manufacturing	0.1	-0.1	-0.6	-0.8	-0.8
Food And Beverages	0.0	-0.1	-0.3	-0.4	-0.4
Tobacco	0.1	0.0	-0.1	0.0	-0.7
Rubber	0.1	0.0	-0.4	-0.5	-0.4
Leather	0.0	0.0	-0.2	-0.5	-0.5
Textiles	0.1	0.0	-0.2	-0.4	-0.3
Knitting & Clothing	0.0	0.0	-0.1	-0.2	-0.2
Wood	0.2	0.1	-0.1	-0.3	-0.4
Furniture	0.2	0.2	0.0	-0.2	-0.1
Pulp & Paper	0.0	-0.1	-0.5	-0.6	-0.5
Printing & Publishing	0.0	-0.1	-0.3	-0.4	-0.4
Primary Metals	-0.4	-1.5	-3.3	-3.6	-3.7
Metal Fabricating	0.4	0.2	-0.1	-0.6	-0.5
Machinery	0.7	0.5	0.2	-0.3	-0.4
Transportation Eqpt.-Total	0.2	0.0	-0.1	-0.2	-0.2
- Motor Vehicles	0.0	-0.2	-0.4	-0.5	-0.4
- Parts & Accessories	0.4	0.3	0.2	0.1	0.1
- Aircraft & Parts	0.2	0.2	-0.1	-0.1	0.0
- Railroad Rolling Stock	1.6	1.4	0.4	-0.6	-0.6
- Shipbuilding	1.0	0.9	0.8	0.0	0.2
- Miscellaneous	0.0	0.0	-0.1	-0.2	-0.1
Electrical Products	0.2	0.0	-0.2	-0.4	-0.4
Non-metallic Minerals	-0.3	-1.1	-2.6	-2.9	-2.7
Petroleum & Coal Products	-0.2	-1.4	-4.4	-4.9	-5.1
Chemicals	-0.2	-0.5	-1.5	-1.6	-1.4
Miscellaneous	0.5	0.3	-0.1	-0.4	-0.3
Durables	0.2	-0.1	-0.6	-0.8	-0.8
Nondurables	0.0	-0.1	-0.6	-0.7	-0.6

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			Impact		
All Industries	5.7	4.1	-3.4	-13.9	-9.5
Agriculture	0.1	0.0	-0.2	-0.2	-0.1
Forestry	0.0	0.0	0.0	0.0	0.0
Fishing	0.0	0.0	0.0	0.0	0.0
Mineral Resources	-0.1	-0.1	-0.2	-0.1	-0.2
Manufacturing	2.0	1.9	1.5	-0.1	1.0
Durables	1.7	1.7	2.2	1.1	1.5
Nondurables	0.3	0.2	-0.7	-1.2	-0.5
Construction	1.8	1.9	0.9	-1.2	-0.2
Transport. & Stor. & Comm.	0.1	0.0	-0.5	-0.8	-0.6
Transportation & Storage	0.0	-0.1	-0.3	-0.3	-0.1
Communications	0.1	0.0	-0.2	-0.5	-0.4
Utilities	0.1	0.1	0.1	0.0	0.1
Trade	0.6	-0.1	-2.2	-4.2	-3.9
Finance	0.1	-0.1	-0.9	-1.4	-1.3
Services	0.8	0.3	-2.1	-5.9	-4.8
Private Commercial	0.5	0.0	-2.4	-5.6	-5.7
Education	0.1	0.1	-0.1	-0.7	-0.6
Health	0.1	0.2	0.4	0.3	1.4
Public Administration	0.3	0.2	0.2	0.0	0.5
Federal Admin.	0.0	-0.1	-0.1	0.0	0.0
Provincial Admin.	0.2	0.2	0.2	0.0	0.0
Municipal Admin.	0.0	0.1	0.1	0.1	0.5

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.1	0.1	-0.1	-0.3	-0.2
Agriculture	0.1	0.0	-0.1	-0.1	-0.1
Forestry	0.0	0.1	0.0	-0.3	-0.4
Fishing	0.0	0.0	-0.3	-0.4	-0.5
Mineral Resources	-0.2	-0.2	-0.4	-0.3	-0.4
Manufacturing	0.2	0.2	0.1	0.0	0.1
Durables	0.3	0.3	0.3	0.2	0.2
Nondurables	0.1	0.0	-0.1	-0.3	-0.1
Construction	0.7	0.8	0.3	-0.4	0.0
Transport. & Stor. & Comm.	0.0	0.0	-0.2	-0.3	-0.2
Transportation & Storage	0.0	0.0	-0.2	-0.2	-0.1
Communications	0.1	0.0	-0.2	-0.4	-0.3
Utilities	0.1	0.1	0.2	0.1	0.1
Trade	0.1	0.0	-0.2	-0.4	-0.4
Finance	0.0	0.0	-0.3	-0.4	-0.3
Services	0.0	0.0	-0.1	-0.3	-0.2
Private Commercial	0.1	0.0	-0.2	-0.5	-0.4
Education	0.0	0.0	0.0	-0.2	-0.2
Health	0.0	0.1	0.1	0.1	0.3
Public Administration	0.1	0.1	0.1	0.0	0.2
Federal Admin.	0.0	0.0	-0.1	0.0	0.0
Provincial Admin.	0.3	0.3	0.3	0.0	0.0
Municipal Admin.	0.0	0.1	0.1	0.1	0.4

Major Indicators for Ontario

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			Impact		
Gross Domestic Product ($71)					
Total	38.9	4.6	-89.4	-262.0	-461.5
Agriculture	0.6	0.0	-0.6	-0.6	0.2
Resource Extraction	-0.5	-0.8	-1.8	-2.9	-5.7
Manufacturing	11.4	-10.6	-58.8	-150.8	-287.0
Electrical Products	1.7	0.5	-1.5	-6.3	-15.9
Motor Vehicles	-0.4	-2.3	-5.7	-12.0	-19.2
Parts & Accessories	4.2	2.8	3.1	3.9	2.9
Primary Metals	-1.4	-6.8	-18.2	-42.1	-75.1
Utilities	1.4	1.4	1.3	0.5	2.0
Electrical	1.3	1.3	1.4	0.7	0.9
Comm. & Personal Services	2.9	1.0	-8.1	-29.2	-49.6
Employment					
Total	3.0	2.2	-1.5	-7.3	-8.2
Agriculture	0.1	0.0	-0.1	-0.1	0.0
Resource Extraction	0.0	0.0	0.0	0.0	-0.1
Manufacturing	0.9	0.7	0.1	-0.5	-0.6
Durables	0.8	0.7	0.8	0.7	0.8
Nondurables	0.1	0.0	-0.6	-1.2	-1.4
Utilities	0.0	0.0	0.1	0.1	0.1
Comm. & Personal Services	0.4	0.2	-0.8	-3.1	-3.3
GDP($71) per employed worker	0.2	-4.6	-13.3	-28.7	-54.8
Investment ($71)					
Nonresidential Structures	28.9	29.5	17.7	4.0	-18.4
Manufacturing	19.5	20.9	16.4	9.7	-5.3
Utilities	1.1	0.8	0.2	-1.3	-3.4
Machinery and Equipment	63.1	61.6	52.9	28.0	-22.3
Residential Structures	1.6	1.8	-3.6	-11.6	-7.7
Labour Force	1.1	0.4	-2.2	-6.6	-8.5
Households	0.2	0.3	-0.5	-3.7	-6.8
Unemployment	-1.9	-1.8	-0.6	0.7	-0.3
Personal Income per Household ($K)	4.5	-2.7	-15.4	-28.9	-34.3
Labour Income per employed worker ($K)	-0.4	-3.0	-6.4	-11.2	-16.2
Dwelling Starts ('000)	0.1	0.1	-0.3	-0.8	-0.3
Unemployment Rate (%)	0.0	0.0	0.0	0.0	0.0

Major Indicators for Ontario

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			% Impact		
Gross Domestic Product ($71)					
Total	0.06	0.01	-0.13	-0.34	-0.50
Agriculture	0.05	0.00	-0.05	-0.05	0.01
Resource Extraction	-0.08	-0.12	-0.27	-0.42	-0.64
Manufacturing	0.06	-0.06	-0.28	-0.61	-0.95
Electrical Products	0.09	0.03	-0.07	-0.27	-0.56
Motor Vehicles	-0.02	-0.13	-0.24	-0.43	-0.55
Parts & Accessories	0.24	0.16	0.13	0.15	0.09
Primary Metals	-0.11	-0.52	-1.17	-2.31	-3.40
Utilities	0.08	0.08	0.07	0.03	0.09
Electrical	0.10	0.09	0.10	0.05	0.05
Comm. & Personal Services	0.03	0.01	-0.06	-0.21	-0.31
Employment					
Total	0.06	0.04	-0.03	-0.13	-0.13
Agriculture	0.04	0.02	-0.05	-0.04	-0.03
Resource Extraction	-0.05	-0.04	-0.08	-0.09	-0.19
Manufacturing	0.08	0.07	0.01	-0.04	-0.05
Durables	0.12	0.12	0.12	0.12	0.12
Nondurables	0.02	-0.01	-0.14	-0.26	-0.31
Utilities	0.06	0.07	0.09	0.09	0.16
Comm. & Personal Services	0.03	0.01	-0.05	-0.16	-0.15
GDP($71) per employed worker	0.00	-0.04	-0.10	-0.20	-0.36
Investment ($71)					
Nonresidential Structures	0.68	0.71	0.36	0.07	-0.21
Manufacturing	4.35	4.76	2.92	1.46	-0.69
Utilities	0.25	0.20	0.06	-0.32	-0.45
Machinery and Equipment	0.84	0.82	0.60	0.26	-0.15
Residential Structures	0.06	0.07	-0.14	-0.46	-0.31
Labour Force	0.02	0.01	-0.04	-0.11	-0.13
Households	0.01	0.01	-0.01	-0.09	-0.15
Unemployment	-0.68	-0.54	-0.21	0.23	-0.14
Personal Income per Household ($K)	0.03	-0.02	-0.09	-0.16	-0.18
Labour Income per employed worker ($K)	-0.01	-0.04	-0.08	-0.13	-0.17

(a) Level Impact

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			Impact		
All Industries	38.9	4.6	-89.4	-262.0	-461.5
Agriculture	0.6	0.0	-0.6	-0.6	0.2
Forestry	0.1	0.1	-0.1	-0.3	-0.6
Fishing	0.0	0.0	0.0	-0.1	-0.1
Resource Extraction	-0.5	-0.8	-1.8	-2.9	-5.7
Metals	-0.7	-1.0	-1.7	-2.6	-5.2
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	0.2	0.2	-0.1	-0.3	-0.5
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	11.4	-10.6	-58.8	-150.8	-287.0
Durables	11.4	-3.8	-29.9	-86.7	-174.0
Nondurables	0.0	-6.8	-28.9	-64.2	-112.9
Construction	10.9	11.0	4.7	-2.6	-7.3
Transport., Stor. & Comm.	3.5	1.2	-6.4	-21.0	-35.7
Transportation	2.3	1.2	-2.7	-9.6	-15.2
Storage	0.1	0.0	-0.2	-0.5	-0.9
Communication	1.1	0.0	-3.6	-10.9	-19.6
Utilities	1.4	1.4	1.3	0.5	2.0
Trade	5.7	1.9	-10.1	-31.1	-53.5
Finance	2.2	-1.5	-12.1	-31.9	-55.8
Services	2.9	1.0	-8.1	-29.2	-49.6
Private	2.2	0.1	-7.9	-25.0	-44.8
Education	0.4	0.4	-0.3	-2.5	-4.0
Health	0.3	0.5	0.1	-1.6	-0.8
Public Administration	0.8	1.0	2.5	8.0	31.6
Federal Admin.	0.1	-0.4	-0.7	-1.0	-1.3
Provincial Admin.	0.2	0.3	0.3	0.2	0.3
Municipal Admin.	0.5	1.0	3.0	8.9	32.7

Ontario
Gross Domestic Product at Factor Cost
(millions of $71)

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.1	0.0	-0.1	-0.3	-0.5
Agriculture	0.1	0.0	0.0	0.0	0.0
Forestry	0.0	0.0	-0.1	-0.2	-0.3
Fishing	0.0	0.0	-0.2	-0.5	-0.8
Resource Extraction	-0.1	-0.1	-0.3	-0.4	-0.6
Metals	-0.1	-0.2	-0.3	-0.5	-0.7
Coal	0.0	0.0	0.0	0.0	0.0
Petroleum & Gas	0.0	0.0	0.0	0.0	0.0
Non-metals	0.2	0.2	-0.1	-0.3	-0.4
Mining Services	0.0	0.0	0.0	0.0	0.0
Manufacturing	0.1	-0.1	-0.3	-0.6	-0.9
Durables	0.1	0.0	-0.2	-0.6	-0.9
Nondurables	0.0	-0.1	-0.4	-0.7	-1.0
Construction	0.4	0.4	0.2	-0.1	-0.2
Transport., Stor. & Comm.	0.1	0.0	-0.1	-0.3	-0.4
Transportation	0.1	0.0	-0.1	-0.2	-0.3
Storage	0.1	0.0	-0.1	-0.4	-0.5
Communication	0.0	0.0	-0.1	-0.3	-0.5
Utilities	0.1	0.1	0.1	0.0	0.1
Trade	0.1	0.0	-0.1	-0.3	-0.5
Finance	0.0	0.0	-0.1	-0.3	-0.4
Services	0.0	0.0	-0.1	-0.2	-0.3
Private	0.0	0.0	-0.1	-0.3	-0.5
Education	0.0	0.0	0.0	-0.1	-0.1
Health	0.0	0.0	0.0	0.0	0.0
Public Administration	0.0	0.0	0.1	0.2	0.8
Federal Admin.	0.0	0.0	0.0	-0.1	-0.1
Provincial Admin.	0.0	0.0	0.0	0.0	0.0
Municipal Admin.	0.1	0.1	0.3	1.0	3.1

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			Impact		
Total-All Manufacturing	11.4	-10.6	-58.8	-150.8	-287.0
Food And Beverages	0.0	-1.1	-3.9	-8.1	-12.8
Tobacco	0.0	0.0	0.0	0.0	-0.1
Rubber	0.5	-0.1	-1.7	-4.2	-8.3
Leather	0.0	0.0	-0.1	-0.4	-0.7
Textiles	0.3	0.0	-0.8	-2.2	-4.0
Knitting & Clothing	0.0	0.0	-0.2	-0.5	-0.9
Wood	0.3	0.1	-0.1	-0.8	-2.0
Furniture	0.4	0.3	0.1	-0.3	-0.6
Pulp & Paper	0.2	-0.2	-1.4	-3.4	-5.9
Printing & Publishing	0.0	-0.8	-3.0	-6.9	-11.7
Primary Metals	-1.4	-6.8	-18.2	-42.1	-75.1
Metal Fabricating	1.9	0.5	-2.3	-7.4	-14.3
Machinery	4.9	3.4	2.4	-1.7	-14.3
Transportation Eqpt.-Total	4.5	1.0	-2.5	-8.3	-17.2
- Motor Vehicles	-0.4	-2.3	-5.7	-12.0	-19.2
- Parts & Accessories	4.2	2.8	3.1	3.9	2.9
- Aircraft & Parts	0.1	0.1	-0.1	-0.2	-0.3
- Railroad Rolling Stock	0.4	0.3	0.2	-0.1	-0.6
- Shipbuilding	0.1	0.1	0.1	0.1	0.2
- Miscellaneous	0.0	0.0	0.0	-0.1	-0.2
Electrical Products	1.7	0.5	-1.5	-6.3	-15.9
Non-metallic Minerals	-0.7	-2.7	-7.9	-19.8	-34.5
Petroleum & Coal Products	-0.3	-1.1	-3.9	-8.5	-16.2
Chemicals	-1.9	-4.3	-13.7	-28.0	-47.7
Miscellaneous	1.2	0.8	-0.2	-1.9	-4.7
Durables	11.4	-3.8	-29.9	-86.7	-174.0
Nondurables	0.0	-6.8	-28.9	-64.2	-112.9

Ontario
Manufacturing Gross Domestic Product at Factor Cost
(millions of $71)

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			% Impact		
Total-All Manufacturing	0.1	-0.1	-0.3	-0.6	-0.9
Food And Beverages	0.0	-0.1	-0.2	-0.4	-0.6
Tobacco	0.0	0.0	0.0	0.0	-0.3
Rubber	0.1	0.0	-0.2	-0.4	-0.7
Leather	0.0	0.0	-0.1	-0.3	-0.6
Textiles	0.0	0.0	-0.1	-0.3	-0.4
Knitting & Clothing	0.0	0.0	0.0	-0.1	-0.2
Wood	0.1	0.0	0.0	-0.2	-0.4
Furniture	0.1	0.1	0.0	-0.1	-0.1
Pulp & Paper	0.0	0.0	-0.1	-0.3	-0.5
Printing & Publishing	0.0	-0.1	-0.3	-0.5	-0.7
Primary Metals	-0.1	-0.5	-1.2	-2.3	-3.4
Metal Fabricating	0.1	0.0	-0.2	-0.4	-0.6
Machinery	0.4	0.3	0.2	-0.1	-0.5
Transportation Eqpt.-Total	0.1	0.0	-0.1	-0.1	-0.2
- Motor Vehicles	0.0	-0.1	-0.2	-0.4	-0.6
- Parts & Accessories	0.2	0.2	0.1	0.1	0.1
- Aircraft & Parts	0.1	0.1	-0.1	-0.1	-0.1
- Railroad Rolling Stock	0.9	0.8	0.3	-0.1	-0.6
- Shipbuilding	0.6	0.5	0.5	0.4	0.4
- Miscellaneous	0.0	0.0	-0.1	-0.1	-0.2
Electrical Products	0.1	0.0	-0.1	-0.3	-0.6
Non-metallic Minerals	-0.1	-0.5	-1.1	-2.4	-3.3
Petroleum & Coal Products	-0.3	-1.2	-3.3	-6.4	-10.3
Chemicals	-0.1	-0.3	-1.0	-1.7	-2.6
Miscellaneous	0.2	0.2	0.0	-0.3	-0.5
Durables	0.1	0.0	-0.2	-0.6	-0.9
Nondurables	0.0	-0.1	-0.4	-0.7	-1.0

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			Impact		
All Industries	3.0	2.2	-1.5	-7.3	-8.2
Agriculture	0.1	0.0	-0.1	-0.1	0.0
Forestry	0.0	0.0	0.0	0.0	0.0
Fishing	0.0	0.0	0.0	0.0	0.0
Mineral Resources	0.0	0.0	0.0	0.0	-0.1
Manufacturing	0.9	0.7	0.1	-0.5	-0.6
Durables	0.8	0.7	0.8	0.7	0.8
Nondurables	0.1	0.0	-0.6	-1.2	-1.4
Construction	1.0	1.1	0.6	-0.2	-0.5
Transport. & Stor. & Comm.	0.1	0.0	-0.2	-0.5	-0.6
Transportation & Storage	0.0	0.0	-0.1	-0.2	-0.1
Communications	0.0	0.0	-0.1	-0.3	-0.5
Utilities	0.0	0.0	0.1	0.1	0.1
Trade	0.3	0.0	-1.0	-2.9	-4.5
Finance	0.1	0.0	-0.4	-1.1	-1.8
Services	0.4	0.2	-0.8	-3.1	-3.3
Private Commercial	0.3	0.0	-1.1	-3.4	-5.4
Education	0.1	0.0	0.0	-0.3	-0.6
Health	0.1	0.1	0.3	0.7	2.6
Public Administration	0.1	0.2	0.4	0.9	3.3
Federal Admin.	0.0	0.0	0.0	-0.1	-0.1
Provincial Admin.	0.1	0.1	0.1	0.1	0.1
Municipal Admin.	0.1	0.1	0.3	0.9	3.3

Ontario
Provincial Employment by Industry
(Labour Force Survey Basis)
(thousands)

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			% Impact		
All Industries	0.1	0.0	0.0	-0.1	-0.1
Agriculture	0.0	0.0	0.0	0.0	0.0
Forestry	0.0	0.0	0.0	-0.2	-0.4
Fishing	0.0	0.0	-0.2	-0.3	-0.6
Mineral Resources	0.0	0.0	-0.1	-0.1	-0.2
Manufacturing	0.1	0.1	0.0	0.0	-0.1
Durables	0.1	0.1	0.1	0.1	0.1
Nondurables	0.0	0.0	-0.1	-0.3	-0.3
Construction	0.4	0.4	0.2	0.0	-0.1
Transport. & Stor. & Comm.	0.0	0.0	-0.1	-0.2	-0.2
Transportation & Storage	0.0	0.0	-0.1	-0.2	-0.1
Communications	0.0	0.0	-0.1	-0.2	-0.3
Utilities	0.1	0.1	0.1	0.1	0.2
Trade	0.0	0.0	-0.1	-0.3	-0.4
Finance	0.0	0.0	-0.1	-0.3	-0.4
Services	0.0	0.0	0.0	-0.2	-0.1
Private Commercial	0.0	0.0	-0.1	-0.3	-0.4
Education	0.0	0.0	0.0	-0.1	-0.2
Health	0.0	0.0	0.1	0.2	0.5
Public Administration	0.0	0.1	0.1	0.3	1.0
Federal Admin.	0.0	0.0	0.0	-0.1	-0.1
Provincial Admin.	0.1	0.1	0.1	0.1	0.1
Municipal Admin.	0.1	0.1	0.3	0.9	2.8

APPENDIX G

INDICATORS OF IMPACTS ON OTHER PROVINCES

Gross Domestic Product
(millions of $71)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			Impact		
Canada	193.9	108.3	-99.6	-328.8	-233.6
Newfoundland	0.8	1.4	4.7	8.8	11.5
Prince Edward Island	0.0	-0.1	-0.5	-0.9	-1.3
Nova Scotia	1.8	2.2	2.0	1.9	3.7
New Brunswick	2.5	3.0	5.5	4.8	6.8
Quebec	49.1	57.8	89.8	89.8	131.9
Ontario	109.2	16.4	-231.9	-450.9	-433.6
Manitoba	3.6	3.9	9.5	12.0	15.0
Saskatchewan	0.7	-2.2	-5.9	-6.3	-8.1
Alberta	12.7	13.5	16.3	12.1	38.9
British Columbia	13.4	12.0	10.9	-0.1	0.6
Territories	0.2	0.3	0.0	0.0	0.9

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			% Impact		
Canada	0.13	0.07	-0.06	-0.18	-0.11
Newfoundland	0.04	0.07	0.21	0.33	0.39
Prince Edward Island	0.01	-0.02	-0.10	-0.18	-0.22
Nova Scotia	0.05	0.06	0.05	0.05	0.08
New Brunswick	0.09	0.10	0.17	0.14	0.17
Quebec	0.14	0.17	0.24	0.21	0.27
Ontario	0.18	0.03	-0.34	-0.58	-0.47
Manitoba	0.06	0.06	0.15	0.17	0.19
Saskatchewan	0.01	-0.04	-0.10	-0.10	-0.11
Alberta	0.09	0.09	0.10	0.07	0.19
British Columbia	0.08	0.07	0.06	0.00	0.00
Territories	0.03	0.04	0.00	0.00	0.08

Labour Force
(thousands)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			Impact		
Canada	0.9	-0.5	-1.9	2.1	5.5
Newfoundland	-0.2	-0.3	-0.1	0.8	0.6
Prince Edward Island	0.0	0.0	-0.1	-0.2	-0.3
Nova Scotia	-0.1	-0.1	-0.2	0.0	-0.3
New Brunswick	0.0	0.1	0.2	0.4	0.3
Quebec	-0.3	0.4	3.8	9.3	9.3
Ontario	3.5	1.7	-4.5	-10.8	-3.8
Manitoba	-0.2	-0.3	-0.1	0.5	-0.2
Saskatchewan	-0.4	-0.6	-0.8	-0.6	-1.7
Alberta	-0.3	-0.3	0.5	1.9	2.6
British Columbia	-0.9	-1.0	-0.5	0.9	-1.1

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
			% Impact		
Canada	0.01	0.00	-0.01	0.01	0.03
Newfoundland	-0.09	-0.11	-0.04	0.28	0.24
Prince Edward Island	-0.05	-0.08	-0.17	-0.24	-0.37
Nova Scotia	-0.03	-0.04	-0.04	0.01	-0.07
New Brunswick	0.00	0.02	0.06	0.11	0.08
Quebec	-0.01	0.01	0.10	0.24	0.23
Ontario	0.07	0.03	-0.08	-0.19	-0.06
Manitoba	-0.04	-0.06	-0.03	0.10	-0.03
Saskatchewan	-0.09	-0.12	-0.15	-0.12	-0.32
Alberta	-0.03	-0.02	0.04	0.13	0.17
British Columbia	-0.06	-0.07	-0.03	0.06	-0.07

Households
(thousands)

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
	Impact				
Canada	0.0	0.0	0.0	0.0	0.0
Newfoundland	0.0	-0.1	0.0	0.4	0.4
Prince Edward Island	0.0	0.0	-0.1	-0.1	-0.2
Nova Scotia	0.0	-0.1	-0.1	0.1	-0.2
New Brunswick	0.0	-0.1	0.0	0.2	-0.1
Quebec	-0.1	0.0	1.6	6.0	6.1
Ontario	0.6	1.1	-0.6	-7.9	-4.9
Manitoba	-0.1	-0.1	-0.1	0.4	-0.1
Saskatchewan	-0.1	-0.2	-0.4	-0.4	-1.2
Alberta	-0.1	-0.2	0.0	0.8	1.0
British Columbia	-0.1	-0.3	-0.3	0.5	-0.8

Scenario A Impact, Sept. 6	1989	1990	1993	1998	2005
	% Impact				
Canada	0.00	0.00	0.00	0.00	0.00
Newfoundland	-0.02	-0.03	-0.02	0.18	0.19
Prince Edward Island	-0.02	-0.05	-0.12	-0.16	-0.32
Nova Scotia	-0.02	-0.03	-0.04	0.03	-0.06
New Brunswick	-0.01	-0.03	0.00	0.09	-0.02
Quebec	0.00	0.00	0.06	0.20	0.19
Ontario	0.02	0.03	-0.02	-0.20	-0.11
Manitoba	-0.02	-0.04	-0.02	0.09	-0.03
Saskatchewan	-0.02	-0.06	-0.11	-0.11	-0.29
Alberta	-0.01	-0.02	0.00	0.08	0.10
British Columbia	-0.01	-0.03	-0.03	0.04	-0.06

Employment
(Labour Force Survey Basis)
(thousands)

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			Impact		
Canada	17.0	16.0	3.6	-25.4	-18.2
Newfoundland	-0.1	0.0	0.0	0.3	0.2
Prince Edward Island	0.0	0.0	-0.1	-0.2	-0.3
Nova Scotia	0.0	0.1	0.0	-0.5	-0.8
New Brunswick	0.0	0.0	0.1	-0.2	-0.6
Quebec	2.8	4.0	5.5	2.9	3.6
Ontario	14.9	12.7	0.1	-22.0	-11.4
Manitoba	-0.1	-0.1	0.1	-0.2	-0.9
Saskatchewan	-0.3	-0.5	-1.0	-1.7	-2.9
Alberta	-0.2	-0.1	-0.6	-1.8	-1.6
British Columbia	-0.1	-0.1	-0.5	-2.0	-3.6

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
			% Impact		
Canada	0.14	0.13	0.03	-0.19	-0.12
Newfoundland	-0.05	-0.03	0.02	0.12	0.09
Prince Edward Island	-0.03	-0.05	-0.19	-0.38	-0.50
Nova Scotia	0.01	0.04	-0.01	-0.13	-0.20
New Brunswick	0.00	0.02	0.05	-0.07	-0.18
Quebec	0.09	0.13	0.17	0.08	0.10
Ontario	0.30	0.26	0.00	-0.40	-0.19
Manitoba	-0.02	-0.02	0.01	-0.05	-0.18
Saskatchewan	-0.06	-0.10	-0.21	-0.35	-0.56
Alberta	-0.01	-0.01	-0.05	-0.14	-0.11
British Columbia	-0.01	-0.01	-0.04	-0.14	-0.24

Unemployment Rates
Average Levels in Per Cent

Scenario B Impact, Aug. 26	1989	1990	1993	1998	2005
Canada	-0.1	-0.1	-0.1	0.2	0.1
Newfoundland	-0.1	-0.1	-0.1	0.2	0.2
Prince Edward Island	0.0	0.0	0.0	0.1	0.1
Nova Scotia	0.0	-0.1	0.0	0.1	0.1
New Brunswick	0.0	0.0	0.0	0.1	0.2
Quebec	-0.1	-0.1	-0.1	0.2	0.1
Ontario	-0.2	-0.1	0.0	0.2	0.1
Manitoba	0.0	-0.1	-0.1	0.2	0.2
Saskatchewan	-0.1	-0.1	0.0	0.2	0.2
Alberta	-0.1	-0.1	0.0	0.2	0.2
British Columbia	-0.1	-0.1	-0.1	0.2	0.1

Gross Domestic Product
(millions of $71)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			Impact		
Canada	134.7	72.5	-87.9	-279.6	-282.7
Newfoundland	0.4	0.6	2.2	4.7	5.8
Prince Edward Island	0.0	-0.1	-0.4	-0.7	-1.0
Nova Scotia	1.5	1.8	1.2	0.7	0.6
New Brunswick	1.8	2.1	3.4	2.8	3.4
Quebec	39.6	49.1	79.6	75.3	93.8
Ontario	68.9	-1.7	-194.9	-366.5	-390.8
Manitoba	2.7	3.0	5.9	5.9	5.1
Saskatchewan	1.2	-0.5	-2.8	-5.6	-10.9
Alberta	8.3	8.1	9.4	5.0	17.1
British Columbia	10.4	10.0	8.7	-0.9	-5.8
Territories	0.1	0.1	-0.2	-0.3	0.0

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			% Impact		
Canada	0.09	0.05	-0.05	-0.15	-0.13
Newfoundland	0.02	0.03	0.10	0.18	0.20
Prince Edward Island	0.00	-0.02	-0.09	-0.14	-0.17
Nova Scotia	0.04	0.05	0.03	0.02	0.01
New Brunswick	0.06	0.07	0.11	0.08	0.09
Quebec	0.12	0.14	0.21	0.18	0.19
Ontario	0.11	0.00	-0.28	-0.47	-0.42
Manitoba	0.04	0.05	0.09	0.09	0.07
Saskatchewan	0.02	-0.01	-0.05	-0.09	-0.15
Alberta	0.06	0.05	0.06	0.03	0.08
British Columbia	0.06	0.06	0.05	0.00	-0.02
Territories	0.01	0.01	-0.03	-0.04	0.00

Labour Force
(thousands)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			Impact		
Canada	0.5	-0.6	-2.4	0.0	0.9
Newfoundland	-0.2	-0.2	-0.1	0.5	0.5
Prince Edward Island	0.0	0.0	-0.1	-0.1	-0.2
Nova Scotia	-0.1	-0.1	-0.2	0.0	-0.3
New Brunswick	0.0	0.0	0.1	0.2	0.1
Quebec	0.0	0.7	3.5	7.8	7.9
Ontario	2.2	0.7	-4.4	-9.6	-6.0
Manitoba	-0.2	-0.2	-0.2	0.1	-0.4
Saskatchewan	-0.3	-0.4	-0.6	-0.5	-1.5
Alberta	-0.3	-0.3	0.0	0.9	1.3
British Columbia	-0.6	-0.7	-0.5	0.7	-0.5

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			% Impact		
Canada	0.00	0.00	-0.02	0.00	0.01
Newfoundland	-0.07	-0.09	-0.06	0.18	0.18
Prince Edward Island	-0.04	-0.06	-0.14	-0.19	-0.26
Nova Scotia	-0.02	-0.03	-0.04	0.00	-0.06
New Brunswick	0.00	0.01	0.03	0.06	0.03
Quebec	0.00	0.02	0.10	0.20	0.20
Ontario	0.04	0.01	-0.08	-0.16	-0.09
Manitoba	-0.03	-0.05	-0.04	0.02	-0.08
Saskatchewan	-0.06	-0.08	-0.11	-0.11	-0.28
Alberta	-0.02	-0.03	0.00	0.06	0.08
British Columbia	-0.04	-0.05	-0.03	0.04	-0.03

Households
(thousands)

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			Impact		
Canada	0.0	0.0	0.0	0.0	0.0
Newfoundland	0.0	0.0	-0.1	0.2	0.3
Prince Edward Island	0.0	0.0	0.0	-0.1	-0.1
Nova Scotia	0.0	-0.1	-0.1	0.1	-0.1
New Brunswick	0.0	0.0	0.0	0.2	0.0
Quebec	0.0	0.1	1.7	5.3	5.8
Ontario	0.4	0.7	-0.8	-6.3	-4.9
Manitoba	0.0	-0.1	-0.1	0.1	-0.3
Saskatchewan	-0.1	-0.1	-0.3	-0.3	-1.0
Alberta	-0.1	-0.2	-0.1	0.3	0.6
British Columbia	-0.1	-0.2	-0.2	0.5	-0.3

Scenario C Impact, Aug. 29	1989	1990	1993	1998	2005
			% Impact		
Canada	0.00	0.00	0.00	0.00	0.00
Newfoundland	-0.01	-0.03	-0.03	0.11	0.13
Prince Edward Island	-0.02	-0.04	-0.09	-0.12	-0.20
Nova Scotia	-0.01	-0.02	-0.03	0.02	-0.03
New Brunswick	-0.01	-0.02	-0.01	0.07	0.01
Quebec	0.00	0.01	0.06	0.18	0.18
Ontario	0.01	0.02	-0.02	-0.16	-0.11
Manitoba	-0.01	-0.03	-0.02	0.03	-0.06
Saskatchewan	-0.02	-0.04	-0.07	-0.08	-0.24
Alberta	-0.01	-0.02	-0.01	0.03	0.05
British Columbia	-0.01	-0.02	-0.02	0.04	-0.02

Employment
(Labour Force Survey Basis)
(thousands)

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			Impact		
Canada	4.2	4.3	1.6	-1.9	2.0
Newfoundland	0.0	0.0	0.1	0.2	0.5
Prince Edward Island	0.0	0.0	0.0	-0.1	-0.2
Nova Scotia	0.0	0.0	0.0	-0.1	-0.1
New Brunswick	0.0	0.0	0.1	0.1	0.1
Quebec	1.0	1.6	2.6	4.7	8.7
Ontario	3.0	2.2	-1.5	-7.3	-8.2
Manitoba	0.0	0.0	0.1	0.1	0.1
Saskatchewan	-0.1	-0.1	-0.2	-0.6	-1.1
Alberta	0.1	0.2	0.3	1.0	2.3
British Columbia	0.2	0.3	0.2	0.1	-0.2

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
			% Impact		
Canada	0.03	0.03	0.01	-0.01	0.01
Newfoundland	-0.01	0.00	0.03	0.10	0.24
Prince Edward Island	-0.01	-0.02	-0.06	-0.17	-0.31
Nova Scotia	-0.01	0.00	-0.01	-0.02	-0.03
New Brunswick	0.01	0.02	0.03	0.02	0.02
Quebec	0.03	0.05	0.08	0.14	0.24
Ontario	0.06	0.04	-0.03	-0.13	-0.13
Manitoba	0.00	0.01	0.02	0.02	0.02
Saskatchewan	-0.01	-0.01	-0.04	-0.14	-0.22
Alberta	0.01	0.02	0.03	0.08	0.16
British Columbia	0.01	0.02	0.02	0.01	-0.01

Unemployment Rates
Average Levels in Per Cent

Scenario E Impact, Oct. 21	1989	1990	1993	1998	2005
Canada	0.0	0.0	0.0	0.0	0.0
Newfoundland	0.0	0.0	0.0	0.0	0.0
Prince Edward Island	0.0	0.0	0.0	0.0	0.0
Nova Scotia	0.0	0.0	0.0	0.0	0.0
New Brunswick	0.0	0.0	0.0	0.0	0.1
Quebec	0.0	0.0	0.0	0.0	0.0
Ontario	0.0	0.0	0.0	0.0	0.0
Manitoba	0.0	0.0	0.0	0.0	0.0
Saskatchewan	0.0	0.0	0.0	0.0	0.0
Alberta	0.0	0.0	0.0	0.0	0.0
British Columbia	0.0	0.0	0.0	0.0	0.0

APPENDIX H

DIRECT INVESTMENT AND OPERATING EXPENSE IMPACTS, BY SECTOR

Informetrica Limited

Investment and Operating Expenditures Necessary to Meet Scenario Standards as of 1987 (in millions of 1986 dollars)

	Scenario A,E		Scenario B	
	Inv.	Op.	Inv.	Op.
Open Pit Mines	.25	5.16	.25	5.3
Food Processing	110.1	19.6	114.3	19.3
Charcoal-Using Restaurants	15.2	1.3	15.2	1.3
Pulp and Paper Manufacturing	123.1	12.6	138.8	23.3
Pulp and Paper, Printing and Inks	95.0	9.83	105.3	10.19
Foundries	147.5	33.4	147.7	33.4
Non-ferrous Smelters	237.	28.5	237.	28.5
Iron and Steel	490.97	69.72	490.97	69.72
Automotive Industry	130.2	21.5	1518.9	16.5
Petroleum Refining	248.8	41.7	248.9	54.3
Asphalt	15.6	3.	15.6	3.
Petrochemicals Manufacturing	1013.6	112.8	1022.	115.4
Dry Cleaners	103.8	12.	103.8	16.5
Non-Metallic Minerals	327.7	61.4	327.7	61.4
Electric Power	112.7	2.9	290.7	5.4
Hospitals	139.6	11.4	139.6	11.4
Municipalities	110.1	4.73	242.5	2.63
Total	3421.22	451.55	5159.12	477.74

	Scenario C	
	Inv.	Op.
Open Pit Mines	.76	.32
Food Processing	32.1	12.2
Charcoal-Using Restaurants	0	0
Pulp and Paper Manufacturing	103.6	20.1
Pulp and Paper, Printing and Inks	25.9	4.75
Foundries	133.8	28.9
Non-ferrous Smelters	160.	21.1
Iron and Steel	400.67	104.62
Automotive Industry	108.6	15.83
Petroleum Refining	167.7	18.2
Asphalt	13.6	2.9
Petrochemicals Manufacturing	733.4	55.02
Dry Cleaners	103.8	1.5
Non-Metallic Minerals	253.	56.4
Electric Power	0	.1
Hospitals	139.6	8.2
Municipalities	13.93	.77
Total	2390.46	338.8